

11/628659

***** QUERY RESULTS *****

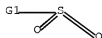
=> d his l31

(FILE 'HCAPLUS' ENTERED AT 08:14:20 ON 17 APR 2009)
L31 24 S L26 OR L30
SAVE TEMP L31 HAM659HCAP/A

FILE 'STNGUIDE' ENTERED AT 08:17:26 ON 17 APR 2009

=> d que l31

L2 STR



G1 [01],[02]

Structure attributes must be viewed using STN Express query preparation:

Uploading L2.str



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ring nodes :
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chain bonds :
1-2 1-3 1-4 5-6 7-8
ring bonds :

11/628659

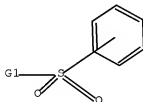
12-13 12-17 13-14 14-15 15-16 16-17
 exact/norm bonds :
 1-2 1-3 1-4
 exact bonds :
 5-6 7-8
 normalized bonds :
 12-13 12-17 13-14 14-15 15-16 16-17

G1:[*1],[*2]

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 12:CLASS
 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom

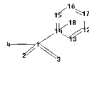
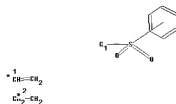
L4 320388 SEA FILE=REGISTRY SSS FUL L2
 L5 STR



G1 {[*1],[*2]}

Structure attributes must be viewed using STN Express query preparation:

Uploading L3.str



chain nodes :

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1 2 3 4 5 6 7 8
ring nodes :
12 13 14 15 16 17
chain bonds :
1-2 1-3 1-4 5-6 7-8
ring bonds :
12-13 12-17 13-14 14-15 15-16 16-17
exact/norm bonds :
1-2 1-3 1-4
exact bonds :
5-6 7-8
normalized bonds :
12-13 12-17 13-14 14-15 15-16 16-17

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G1:[*1],[*2]

Match level :

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1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 12:CLASS
13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom

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L7      81379 SEA FILE=REGISTRY SUB=L4 SSS FUL L5
L8      15842 SEA FILE=HCAPLUS ABB=ON PLU=ON L7
L9      106 SEA FILE=HCAPLUS ABB=ON PLU=ON L8 AND 45/SC,SX
L10     25967 SEA FILE=HCAPLUS ABB=ON PLU=ON LEATHER+OLD,UF/CT
L11     52 SEA FILE=HCAPLUS ABB=ON PLU=ON L9 AND L10
L13     67221 SEA FILE=HCAPLUS ABB=ON PLU=ON (DYE# OR DYEING#) (2A)
          (REACT? OR AZO? OR POLYAZO?)
L15     50 SEA FILE=HCAPLUS ABB=ON PLU=ON L11 AND L13
L16     50 SEA FILE=HCAPLUS ABB=ON PLU=ON L15 AND L10
L17     50 SEA FILE=HCAPLUS ABB=ON PLU=ON L15 AND (LEATHER?)
L18     50 SEA FILE=HCAPLUS ABB=ON PLU=ON L16 OR L17
L19     47 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND (AY<2005 OR PY<2005
          OR PRY<2005)
L21     4291 SEA FILE=HCAPLUS ABB=ON PLU=ON "REACTIVE DYEING"+OLD/CT
L22     7828 SEA FILE=HCAPLUS ABB=ON PLU=ON REACTIVE (L) DYEING
L24     15 SEA FILE=HCAPLUS ABB=ON PLU=ON L19 AND L21
L25     24 SEA FILE=HCAPLUS ABB=ON PLU=ON L19 AND L22
L26     24 SEA FILE=HCAPLUS ABB=ON PLU=ON L24 OR L25
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          OR 110-17-8/BI OR 145017-98-7/BI OR 174491-68-0/BI OR 3029-64-9
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          OR 108-05-4/BI OR 108-31-6/BI OR 108-46-3/BI OR 109-01-3/BI
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 -2/BI OR 149124-66-3/BI OR 149124-67-4/B

L28 267 SEA FILE=REGISTRY ABB=ON PLU=ON L27 AND N/ELS
 L29 209186 SEA FILE=HCAPLUS ABB=ON PLU=ON L28
 L30 24 SEA FILE=HCAPLUS ABB=ON PLU=ON L26 AND L29
 L31 24 SEA FILE=HCAPLUS ABB=ON PLU=ON L26 OR L30

=> d 131 1-24 ibib abs hitstr hitind

L31 ANSWER 1 OF 24 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2005:1021420 HCAPLUS Full-text
 DOCUMENT NUMBER: 143:308063
 TITLE: Method for improved dyeing of genuine
 leather with reactive dyes
 INVENTOR(S): Kanbai, V. A.; Bulgakova, I. V.; Zolina, L. I.;
 Azarenkova, M. A.
 PATENT ASSIGNEE(S): Moskovskii Gosudarstvennyi Universitet Dizayna i
 Tekhnologii, Russia
 SOURCE: Russ., No pp. given
 CODEN: RUXXE7
 DOCUMENT TYPE: Patent
 LANGUAGE: Russian
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2260643	C2	20050920	RU 2003-135588	20031210 <--
PRIORITY APPLN. INFO.:			RU 2003-135588	20031210 <--

AB A method for dyeing genuine leather with reactive dyes comprises neutralization of semifinished leather, reactive dyeing and subsequent fixation with an alkaline reagent. Neutralization is carried out using sodium bicarbonate in presence of 4.5-5.0% of Deep Dyeing preparation, dyeing is achieved with 2.5-5% of reactive dye at 3.4-3.5 pH in the presence of 0.9-1.2 g/L of alizarin oil, and fixation is performed simultaneously with fatliquoring at 8.5-8.9 pH with 1.3-1.8% of sodium hydrocarbonate and 1.8-2.2% of Polinap AD in the fatliquoring composition which is used at 3.8-4.2%; all concns. are based on leather weight Dyed leather is rinsed by 0.8-1.2% solution of nonionic surfactant, such as Neonol AF 9-10. The described method results in deep interlocking of reactive dyes with leather, even distribution of color with excellent color fastness, and dyed leather goods have improved chemical and environmental resistance.

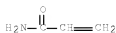
IT 9003-05-8, Polyacrylamide
 RL: MOA (Modifier or additive use); USES (Uses)
 (cationic; method for dyeing leather with
 reactive dyes resulting in improved color fastness)

RN 9003-05-8 HCAPLUS
 CN 2-Propenamide, homopolymer (CA INDEX NAME)

CM 1

CRN 79-06-1

CMF C3 H5 N O

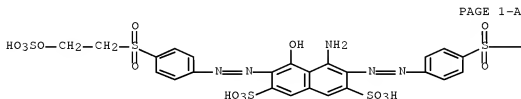


IT 17095-24-8, Reactive black 4ST

RL: RCT (Reactant); RACT (Reactant or reagent)
 (method for dyeing leather with reactive
 dyes resulting in improved color fastness)

RN 17095-24-8 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3,6-bis[2-[4-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]diazenyl]-, sodium salt (1:4) (CA INDEX NAME)



PAGE 1-A

●4 Na

PAGE 1-B

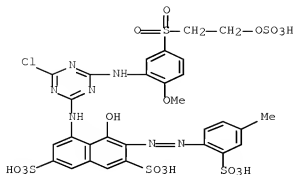


IT 75037-16-0, Reactive Red 4Ssh

RL: TEM (Technical or engineered material use); USES (Uses)
 (method for dyeing leather with reactive
 dyes resulting in improved color fastness)

RN 75037-16-0 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 5-[[4-chloro-6-[[2-methoxy-5-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-4-hydroxy-3-[2-(4-methyl-2-sulfophenyl)diazenyl]-, sodium salt (1:4) (CA INDEX NAME)



● 4 Na

- IC ICM D06P003-32
ICS D06P003-10
- CC 45-2 (Industrial Organic Chemicals, Leather, Fats, and Waxes)
- ST excellent dye fixation color fastness leather reactive dyeing
- IT Leather
(dyeing of; method for dyeing leather with reactive dyes resulting in improved color fastness)
- IT Reactive dyes
(for leather; method for dyeing leather with reactive dyes resulting in improved color fastness)
- IT Neutralization
(leather surface; method for dyeing leather with reactive dyes resulting in improved color fastness)
- IT Polyesters, uses
RL: NUU (Other use, unclassified); USES (Uses)
(method for dyeing leather with reactive dyes resulting in improved color fastness)
- IT Surfactants
(nonionic; method for dyeing leather with reactive dyes resulting in improved color fastness)
- IT Reactive dyeing
(process for leather; method for dyeing leather with reactive dyes resulting in improved color fastness)
- IT Castor oil
RL: NUU (Other use, unclassified); USES (Uses)
(sulfated; method for dyeing leather with reactive dyes resulting in improved color fastness)
- IT 9663-05-8, Polyacrylamide
RL: MOA (Modifier or additive use); USES (Uses)
(cationic; method for dyeing leather with reactive dyes resulting in improved color fastness)
- IT 37205-87-1, Neonol AF 9-10 737791-82-1, Polinap AD 864876-39-1, Deep Dyeing
RL: NUU (Other use, unclassified); USES (Uses)
(method for dyeing leather with reactive dyes resulting in improved color fastness)

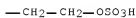
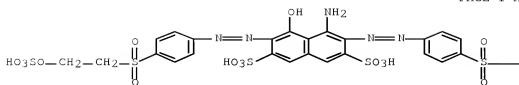
IT 17095-24-8, Reactive black 4ST
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (method for dyeing leather with reactive
 dyes resulting in improved color fastness)

IT 75037-16-0, Reactive Red 4SSh 864876-58-4,
 Reactive Deep Black KT 864876-73-3, Reactive Deep
 Black 4ST 864876-74-4, Reactive Golden Yellow 43
 RL: TEM (Technical or engineered material use); USES (Uses)
 (method for dyeing leather with reactive
 dyes resulting in improved color fastness)

IT 144-55-8, Sodium bicarbonate, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (neutralization and fixation agent; method for dyeing
 leather with reactive dyes resulting in
 improved color fastness)

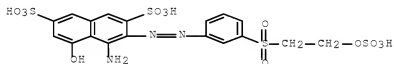
L31 ANSWER 2 OF 24 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2005:460022 HCAPLUS Full-text
 DOCUMENT NUMBER: 143:154896
 TITLE: Compositions and preparation of azo dark
 blue dye for dyeing fabric and
 leather
 INVENTOR(S): Xi, Xiang; Wu, Jinglei; Li, Xingjun
 PATENT ASSIGNEE(S): Shanghai Dyestuff Chemical Plant No.8, Peop. Rep.
 China
 SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, No pp.
 given
 CODEN: CNXXEV
 DOCUMENT TYPE: Patent
 LANGUAGE: Chinese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1511888	A	20040714	CN 2002-160741	20021227 <--
PRIORITY APPLN. INFO.:			CN 2002-160741	20021227 <--
OTHER SOURCE(S): MARPAT 143:154896				
AB The dark blue dye compns., suitable for dyeing and printing cotton, wool, silk, leather, synthetic polyamide fiber and other blended fiber fabric, are prepared via compounding several kinds of active dyes. The active dye compns. have high reaction property and are especially suitable for middle temperature dyeing.				
IT 55909-92-7 86634-91-5 281656-02-8 281656-13-1 859503-74-5 859503-75-6 859503-76-7 859503-77-8 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses) (compns. of active azo dark blue dyes for dyeing fabric and leather)				
RN 55909-92-7 HCAPLUS				
CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3,6-bis[2-[4-[(2- (sulfooxy)ethyl)sulfonyl]phenyl]diazenyl]- (CA INDEX NAME)				



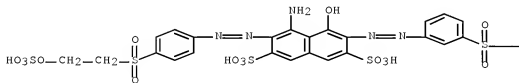
RN 86634-91-5 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[2-[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]diazenyl]- (CA INDEX NAME)



RN 281656-02-8 HCAPLUS

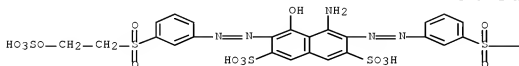
CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-6-[2-[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]diazenyl]-3-[2-[4-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]diazenyl]- (CA INDEX NAME)



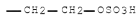
RN 281656-13-1 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3,6-bis[2-[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]diazenyl]- (CA INDEX NAME)

PAGE 1-A



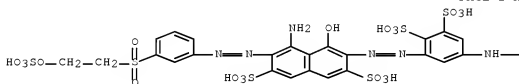
PAGE 1-B



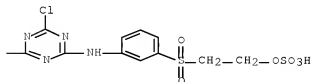
RN 859503-74-5 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-6-[2-[5-[[4-chloro-6-[[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-2,3-disulphophenyl]diazenyl]-5-hydroxy-3-[2-[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]diazenyl]- (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



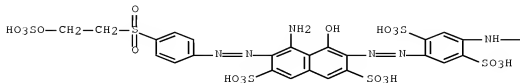
RN 859503-75-6 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-6-[2-[4-[[4-chloro-6-[[3-[[2-

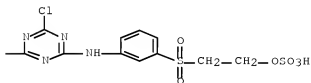
11/628659

(sulfooxy)ethyl)sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-2,5-disulfophenyl]diazenyl]-5-hydroxy-3-[2-[4-[2-(sulfooxy)ethyl)sulfonyl]phenyl]diazenyl]- (CA INDEX NAME)

PAGE 1-A



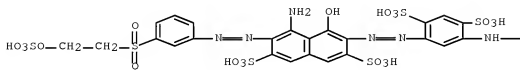
PAGE 1-B



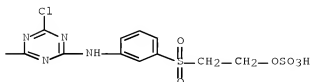
RN 859503-76-7 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-6-[2-[5-[[4-chloro-6-[[3-[[2-(sulfooxy)ethyl)sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-2,4-disulfophenyl]diazenyl]-5-hydroxy-3-[2-[3-[[2-(sulfooxy)ethyl)sulfonyl]phenyl]diazenyl]- (CA INDEX NAME)

PAGE 1-A



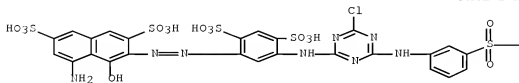
PAGE 1-B



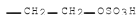
RN 859503-77-8 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 5-amino-3-[2-[5-[[4-chloro-6-[[3-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-2,4-disulphophenyl]diazenyl]-4-hydroxy- (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IC ICM C09B067-24

ICS D06P001-38

CC 41-3 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)

Section cross-reference(s): 40, 45

ST active azo dark blue dye compn fabric leather dyeing

IT Textiles
(blended; dyeing with active azo dark blue dyes)IT Pigments, nonbiological
(blue; compns. of active azo dark blue dyes for dyeing fabric and leather)IT Reactive azo dyes
(compns. of active azo dark blue dyes for dyeing fabric and leather)IT Textiles
(cotton; dyeing with active azo dark blue dyes)IT Leather
Silk
Wool
(dyeing with active azo dark blue dyes)IT Polyamide fibers, processes
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)
(dyeing with active azo dark blue dyes)IT Dyeing
(of cotton, wool, silk, leather, polyamide fiber and other blended fabric with active azo dark blue dyes)IT 55909-92-7 86634-91-5 281656-02-8
281656-13-1 859503-74-5 859503-75-6
859503-76-7 859503-77-8

RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(comps. of active azo dark blue dyes for dyeing fabric and leather)

L31 ANSWER 3 OF 24 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2005:460021 HCAPLUS Full-text
 DOCUMENT NUMBER: 143:154895
 TITLE: Composition and preparation of yellow azo dye for fabric dyeing
 INVENTOR(S): Xi, Xiangyun; Wu, Jinglei; Cao, Yitian
 PATENT ASSIGNEE(S): Shanghai Dyestuff Chemical Plant No.8, Peop. Rep. China
 SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, No pp. given
 CODEN: CNXXEV
 DOCUMENT TYPE: Patent
 LANGUAGE: Chinese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1511887	A	20040714	CN 2002-160740	20021227 <--
CN 100357359	C	20071226		
PRIORITY APPLN. INFO.:			CN 2002-160740	20021227 <--
OTHER SOURCE(S):	MARPAT 143:154895			

AB The yellow dye comps., suitable for dyeing and printing cotton, wool, silk, leather, synthetic polyamide fiber and other blended fabric, are prepared via compounding several kinds of active azo dyes containing sulfo groups. The dye comps. have high reaction property, bright color and excellent color fastness, and can be used at middle temperature, e.g., at 50-70°.

IT 118739-29-0 142279-62-7 143354-19-2
 163965-63-7 163965-64-8 176791-48-3
 859497-86-2 859497-87-3

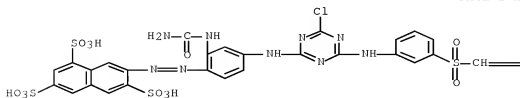
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(composition and preparation of yellow azo dye containing sulfo groups for dyeing of fabric and leather)

RN 118739-29-0 HCAPLUS

CN 1,3,6-Naphthalenetrisulfonic acid,
 7-[2-[2-[(aminocarbonyl)amino]-4-[[4-chloro-6-[[3-(ethenylsulfonyl)phenyl]amino]-1,3,5-triazin-2-yl]amino]phenyl]diazonyl]-
 (CA INDEX NAME)

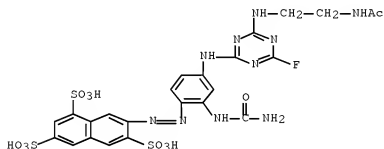
PAGE 1-A



=CH2

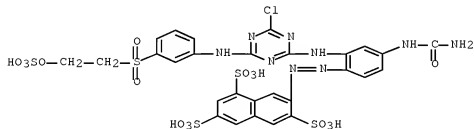
RN 142279-62-7 HCAPLUS

CN 1,3,6-Naphthalenetrisulfonic acid,
7-[2-[4-[[4-[2-(acetylamino)ethyl]amino]-6-fluoro-1,3,5-triazin-2-yl]amino]-2-[(aminocarbonyl)amino]phenyl]diazenyl]- (CA INDEX NAME)



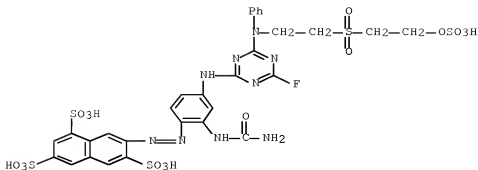
RN 143354-19-2 HCAPLUS

CN 1,3,6-Naphthalenetrisulfonic acid,
7-[2-[4-[(aminocarbonyl)amino]-2-[[4-chloro-6-[[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]phenyl]diazenyl]- (CA INDEX NAME)



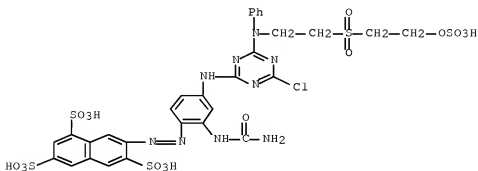
RN 163965-63-7 HCAPLUS

CN 1,3,6-Naphthalenetrisulfonic acid,
7-[2-[2-[(aminocarbonyl)amino]-4-[[4-fluoro-6-[phenyl[2-[[2-(sulfooxy)ethyl]sulfonyl]ethyl]amino]-1,3,5-triazin-2-yl]amino]phenyl]diazenyl]- (CA INDEX NAME)



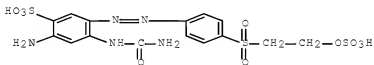
RN 163965-64-8 HCAPLUS

CN 1,3,6-Naphthalenetrisulfonic acid,
7-[2-[2-[(aminocarbonyl)amino]-4-[[4-chloro-6-[phenyl[2-[[2-(sulfooxy)ethyl]sulfonyl]ethyl]amino]-1,3,5-triazin-2-yl]amino]phenyl]diazenyl]- (CA INDEX NAME)



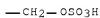
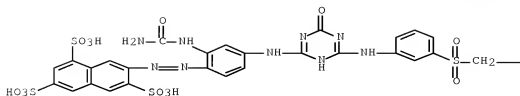
RN 176791-48-3 HCAPLUS

CN Benzenesulfonic acid, 2-amino-4-[(aminocarbonyl)amino]-5-[2-[4-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]diazenyl]- (CA INDEX NAME)



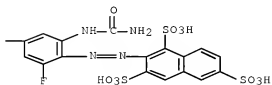
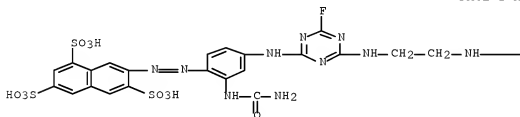
RN 859497-86-2 HCAPLUS

CN 1,3,6-Naphthalenetrisulfonic acid,
7-[2-[2-[(aminocarbonyl)amino]-4-[[5,6-dihydro-6-oxo-4-[[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]phenyl]diazenyl]- (CA INDEX NAME)



RN 859497-87-3 HCAPLUS

CN 1,3,6-Naphthalenetrisulfonic acid,
 2-[2-[2-[(aminocarbonyl)amino]-4-[[2-[[4-[[3-[(aminocarbonyl)amino]-4-[2-
 (3,6,8-trisulfo-2-naphthalenyl)diazenyl]phenyl]amino]-6-fluoro-1,3,5-
 triazin-2-yl]amino]ethyl]amino]-6-fluorophenyl]diazenyl]- (CA INDEX NAME)



IC ICM C09B062-026

ICS C09B067-24; D06P001-38

CC 41-3 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic
 Sensitizers)

Section cross-reference(s): 40, 45

ST fabric dyeing azo yellow dye compn
 IT Textiles
 (blend; dyeing with yellow azo dyes)
 IT ~~Reactive azo dyes~~
 (composition and preparation of yellow azo dye containing sulfo
 groups for dyeing of fabric and leather)
 IT Textiles
 (cotton; dyeing with yellow azo dyes)
 IT Leather
 Silk
 Wool
 (dyeing with yellow azo dyes)
 IT Polyamide fibers, processes
 RL: PEP (Physical, engineering or chemical process); PYP (Physical
 process); PROC (Process)
 (dyeing with yellow azo dyes)
 IT Dyeing
 (of cotton, wool, silk, leather, synthetic polyamide fiber
 and blended fabric with yellow azo dyes)
 IT Pigments, nonbiological
 (yellow; composition and preparation of yellow azo dye containing
 sulfo groups for dyeing of fabric and leather)
 IT 118739-29-0 142279-62-7 143354-19-2
 163965-63-7 163965-64-8 176791-48-3
 859497-86-2 859497-87-3
 RL: PEP (Physical, engineering or chemical process); PYP (Physical
 process); TEM (Technical or engineered material use); PROC (Process); USES
 (Uses)
 (composition and preparation of yellow azo dye containing sulfo
 groups for dyeing of fabric and leather)

L31 ANSWER 4 OF 24 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2005:460020 HCAPLUS Full-text
 DOCUMENT NUMBER: 143:154894
 TITLE: Composition and preparation of azo red
 dye for dyeing fiber and leather
 INVENTOR(S): Xi, Xianyun; Wu, Jinglei; Lu, Jinde
 PATENT ASSIGNEE(S): Shanghai Dyestuff Chemical Plant No.8, Peop. Rep.
 China
 SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, No pp.
 given
 CODEN: CNXXEV
 DOCUMENT TYPE: Patent
 LANGUAGE: Chinese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
CN 1511886	A	20040714	CN 2002-160738	20021227 <--
CN 100404629	C	20080723		
PRIORITY APPLN. INFO.:			CN 2002-160738	20021227 <--
OTHER SOURCE(S):	MARPAT 143:154894			
AB The red dye compns. are suitable for dyeing and printing cotton, wool, silk, leather, synthetic polyamide fiber and other blended fiber fabric and prepared via compounding several kinds of active dyes. The compns. have high reaction property, bright color and excellent color fastness, and are suitable for middle temperature dyeing at 50-70°.				
IT 70929-83-8 150176-85-5 774169-37-8				
859500-58-6 859500-59-7 859500-60-0				

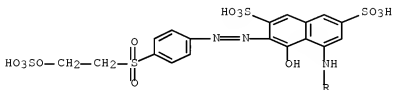
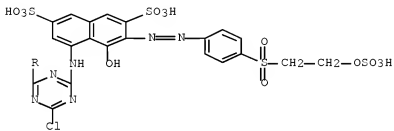
859500-61-1 859500-62-2

RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(composition of reactive azo red dye for dyeing fiber and leather)

RN 70929-83-8 HCAPLUS

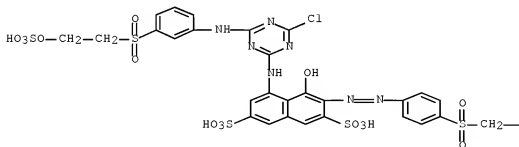
CN 2,7-Naphthalenedisulfonic acid, 4,4'-[(6-chloro-1,3,5-triazine-2,4-diyl)diimino]bis[5-hydroxy-6-[[4-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]azo]-(9CI) (CA INDEX NAME)

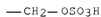


RN 150176-85-5 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 5-[[4-chloro-6-[[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-4-hydroxy-3-[2-[4-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]diazonyl]-(CA INDEX NAME)

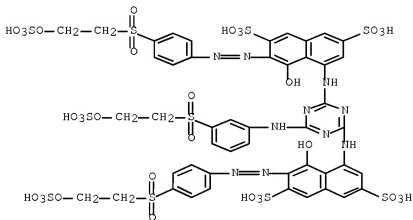
PAGE 1-A





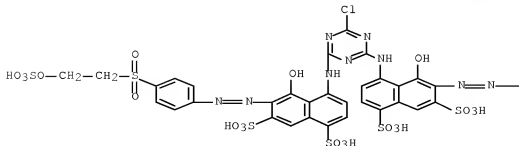
RN 774169-37-8 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4,4'-[[6-[[3-[[2-(sulfooxy)ethylsulfonyl]phenyl]amino]-1,3,5-triazine-2,4-diyl]diimino]bis[5-hydroxy-6-[[4-[[2-(sulfooxy)ethylsulfonyl]phenyl]azo]- (9CI) (CA INDEX NAME)

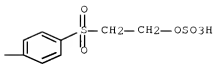


RN 859500-58-6 HCAPLUS

CN 1,7-Naphthalenedisulfonic acid, 4,4'-[(6-chloro-1,3,5-triazine-2,4-diyl)diimino]bis[5-hydroxy-6-[2-[4-[[2-(sulfooxy)ethylsulfonyl]phenyl]diazenyl]- (CA INDEX NAME)



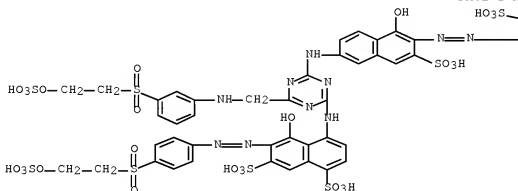
PAGE 1-B



RN 859500-59-7 HCAPLUS

CN 1,7-Naphthalenedisulfonic acid, 5-hydroxy-4-[[4-[[5-hydroxy-7-sulfo-6-[2-(2-sulfoxyphenyl)diazenyl]-2-naphthalenyl]amino]-6-[[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]amino]methyl]-1,3,5-triazin-2-yl]amino]-6-[2-[4-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]diazenyl]- (CA INDEX NAME)

PAGE 1-A

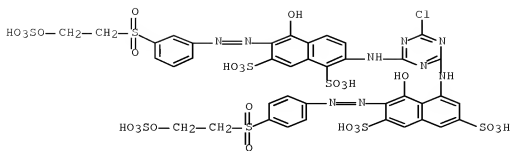


PAGE 1-B



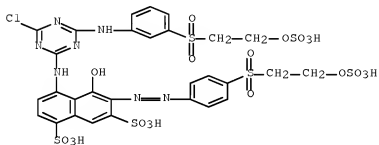
RN 859500-60-0 HCAPLUS

CN 1,7-Naphthalenedisulfonic acid, 2-[[4-chloro-6-[[8-hydroxy-3,6-disulfo-7-[2-[4-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]diazenyl]-1-naphthalenyl]amino]-1,3,5-triazin-2-yl]amino]-5-hydroxy-6-[2-[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]diazenyl]- (CA INDEX NAME)



RN 859500-61-1 HCAPLUS

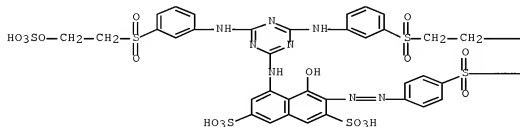
CN 1,7-Naphthalenedisulfonic acid, 4-[[[4-chloro-6-[[[2-(sulfooxy)ethylsulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-5-hydroxy-6-[2-[4-[[2-(sulfooxy)ethylsulfonyl]sulfonyl]phenyl]diazenyl]- (CA INDEX NAME)



RN 859500-62-2 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 5-[[[4,6-bis[[3-[[2-(sulfooxy)ethylsulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-4-hydroxy-3-[2-[4-[[2-(sulfooxy)ethylsulfonyl]sulfonyl]phenyl]diazenyl]- (CA INDEX NAME)

PAGE 1-A



—OSO₃H

—CH₂—CH₂—OSO₃H

IC ICM C09B062-026
ICS C09B067-24; D06P001-38

CC 41-3 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)
Section cross-reference(s): 40, 45

ST active azo red dye compn fiber leather
dyeing

IT Textiles
(blended; dyeing with reactive azo red
dyes containing sulfo groups)

IT Reactive azo dyes
(composition of reactive azo red dye for
dyeing fiber and leather)

IT Textiles
(cotton; dyeing with reactive azo red
dyes containing sulfo groups)

IT Leather
Silk
Wool
(dyeing with reactive azo red
dyes containing sulfo groups)

IT Polyamide fibers, processes
RL: PEP (Physical, engineering or chemical process); PYP (Physical
process); PROC (Process)
(dyeing with reactive azo red
dyes containing sulfo groups)

IT Dyeing
(of cotton, wool, silk, leather, polyamide fiber and blended
fiber fabric with reactive azo red dyes)

IT Pigments, nonbiological
(red; composition of reactive azo red dye for
dyeing fiber and leather)

IT 70929-83-8 150176-85-5 774169-37-8
859500-58-6 859500-59-7 859500-60-0
859500-61-1 859500-62-2
RL: PEP (Physical, engineering or chemical process); PYP (Physical
process); TEM (Technical or engineered material use); PROC (Process); USES
(Uses)
(composition of reactive azo red dye for
dyeing fiber and leather)

L31 ANSWER 5 OF 24 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:460018 HCAPLUS Full-text
DOCUMENT NUMBER: 143:154893
TITLE: Composition of bright azo red dyes
for dyeing fiber and leather
INVENTOR(S): Xi, Xiangyun; Wu, Jinglei; Li, Xuanji
PATENT ASSIGNEE(S): Shanghai Dyestuff Chemical Plant No.8, Peop. Rep.
China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, No pp.
given
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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CN 1511884	A	20040714	CN 2002-160739	20021227 <--
CN 100404628	C	20080723		
PRIORITY APPLN. INFO.:			CN 2002-160739	20021227 <--
OTHER SOURCE(S):	MARPAT 143:154893			

AB The bright red dye composition suitable for dyeing and printing cotton, wool, silk, leather, synthetic polyamide fiber and other blended fabric are prepared via compounding several kinds of active dyes. The active dye compns. have excellent coloring capacity and are especially suitable for middle temperature dyeing of cotton fabric at 50-70°.

IT 146578-98-5 250152-76-2 859502-95-7
859502-96-8 859502-97-9 859502-98-0
859502-99-1 859503-00-7 859503-01-8

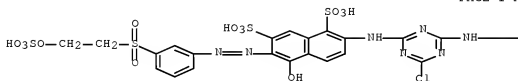
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(composition of azo bright red dyes for dyeing fiber and leather)

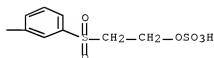
RN 146578-98-5 HCAPLUS

CN 1,7-Naphthalenedisulfonic acid, 2-[[4-chloro-6-[[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-5-hydroxy-6-[2-[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]diazenyl]- (CA INDEX NAME)

PAGE 1-A

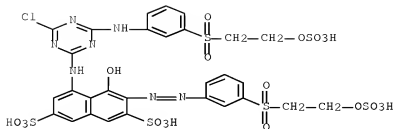


PAGE 1-B



RN 250152-76-2 HCAPLUS

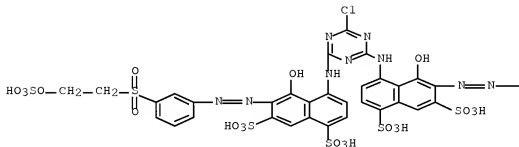
CN 2,7-Naphthalenedisulfonic acid, 5-[[4-chloro-6-[[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-4-hydroxy-3-[2-[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]diazenyl]- (CA INDEX NAME)



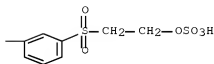
RN 859502-95-7 HCAPLUS

CN 1,7-Naphthalenedisulfonic acid, 4,4'-[(6-chloro-1,3,5-triazine-2,4-diyl)diimino]bis[5-hydroxy-6-[[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]azo]- (9CI) (CA INDEX NAME)

PAGE 1-A

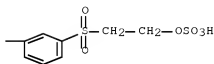
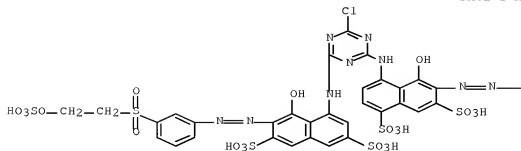


PAGE 1-B



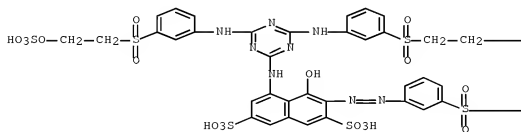
RN 859502-96-8 HCAPLUS

CN 1,7-Naphthalenedisulfonic acid, 4-[[4-chloro-6-[[8-hydroxy-3,6-disulfo-7-[2-[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]diazenyl]-1-naphthalenyl]amino]-1,3,5-triazin-2-yl]amino]-5-hydroxy-6-[2-[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]diazenyl]- (CA INDEX NAME)



RN 859502-97-9 HCAPLUS

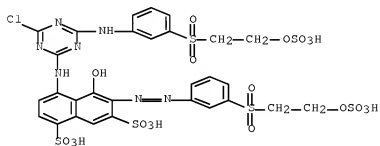
CN 2,7-Naphthalenedisulfonic acid, 5-[[[4,6-bis[[3-[[2-(sulfooxy)ethylsulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-4-hydroxy-3-[2-[3-[[2-(sulfooxy)ethylsulfonyl]phenyl]diazonyl]-





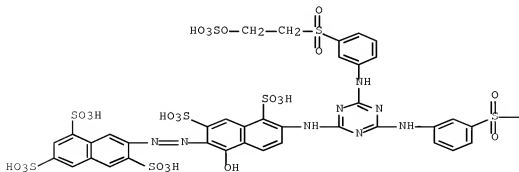
RN 859502-98-0 HCAPLUS

CN 1,7-Naphthalenedisulfonic acid, 4-[[4-chloro-6-[[3-[[2-(sulfooxy)ethylsulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-5-hydroxy-6-[2-[3-[[2-(sulfooxy)ethylsulfonyl]phenyl]diazenyl]-



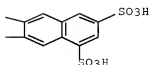
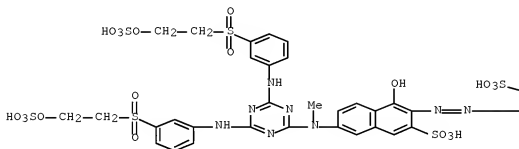
RN 859502-99-1 HCAPLUS

CN 1,3,6-Naphthalenetrisulfonic acid, 7-[2-[6-[[4,6-bis[[3-[[2-(sulfooxy)ethylsulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3,5-disulfo-2-naphthalenyl]diazenyl]- (CA INDEX NAME)

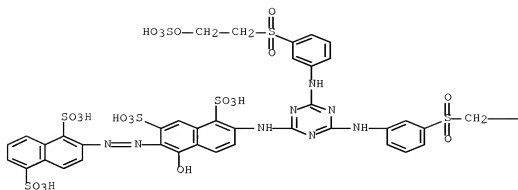




RN 859503-00-7 HCAPLUS
 CN 1,3,6-Naphthalenetrisulfonic acid,
 7-[2-[6-[[4,6-bis[[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-
 triazin-2-yl]methylamino]-1-hydroxy-3-sulfo-2-naphthalenyl]diazenyl]- (CA
 INDEX NAME)



RN 859503-01-8 HCAPLUS
 CN 1,5-Naphthalenedisulfonic acid, 2-[2-[6-[[4,6-bis[[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3,5-disulfo-2-naphthalenyl]diazenyl]- (CA INDEX NAME)



—CH₂—OSO₃H

- IC ICM C09B062-00
ICS C09B067-24; D06P001-38
- CC 41-3 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)
Section cross-reference(s): 40, 45
- ST active bright azo red dye compn fiber leather dyeing
- IT Textiles
(blended; dyeing with azo bright red dyes)
- IT Reactive azo dyes
(composition of azo bright red dyes for dyeing fiber and leather)
- IT Textiles
(cotton; dyeing with azo bright red dyes)
- IT Leather
Silk
Wool
(dyeing with azo bright red dyes)
- IT Dyeing
(of cotton, wool, silk, leather, polyamide fiber and blended fabric with azo bright red dyes)
- IT Polyamide fibers, processes
RL: PEP (Physical, engineering or chemical process); PYP (Physical

process); PROC (Process)
 (of cotton, wool, silk, leather, polyamide fiber and blended
 fabric with azo bright red dyes)
 IT Pigments, nonbiological
 (red; composition of azo bright red dyes for dyeing
 fiber and leather)
 IT 146378-96-5 250152-76-2 859502-95-7
 859502-96-8 859502-97-9 859502-98-0
 859502-99-1 859503-00-7 859503-01-8
 RL: PEP (Physical, engineering or chemical process); PYP (Physical
 process); TEM (Technical or engineered material use); PROC (Process); USES
 (Uses)
 (composition of azo bright red dyes for dyeing fiber and
 leather)

L31 ANSWER 6 OF 24 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:39060 HCAPLUS Full-text

DOCUMENT NUMBER: 143:308006

TITLE: Effect of vinyl acetate grafting on the dyeability of
 chrome leather

AUTHOR(S): Mohamed, O. A.; Haroun, A. A.; El-Sayed, N. H.
 CORPORATE SOURCE: Dept. of Chemistry of Tanning Materials and Protein,
 National Research Centre, Cairo, Egypt

SOURCE: Journal of the Society of Leather Technologists and
 Chemists (2004), 88(6), 231-235
 CODEN: JSLTBY; ISSN: 0144-0322

PUBLISHER: Society of Leather Technologists and Chemists

DOCUMENT TYPE: Journal

LANGUAGE: English

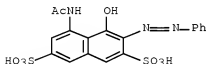
AB This study is concerned with enhancing the dyeability of leather by graft
 polymerization with vinyl acetate. The application of a vinyl sulfone
 reactive dye to the grafted leather revealed that vinyl acetate imparted
 addnl. sites to the leather available for attachment of the reactive dye.

IT 3734-67-6, C.I. Acid Red 1

RL: TEM (Technical or engineered material use); USES (Uses)
 (Amecid Floxine 2GN, red dye; effect of vinyl acetate grafting on
 dyeing of chrome leather with)

RN 3734-67-6 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 5-(acetylamino)-4-hydroxy-3-(2-
 phenyldiazenyl)-, sodium salt (1:2) (CA INDEX NAME)



● 2 Na

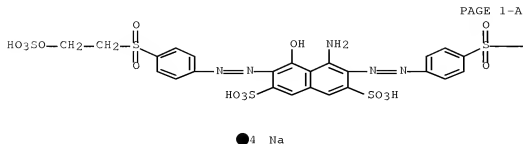
IT 17095-24-8, Remazol Black B

RL: TEM (Technical or engineered material use); USES (Uses)
 (black reactive dye; effect of vinyl acetate
 grafting on dyeing of chrome leather with)

RN 17095-24-8 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3,6-bis[2-[4-[[2-

(sulfooxy)ethyl)sulfonyl]phenyl]diazanyl]-, sodium salt (1:4) (CA INDEX NAME)



PAGE 1-B



IT 10139-51-2, Ceric ammonium nitrate
 RL: CAT (Catalyst use); USES (Uses)
 (graft polymerization catalyst; in effect of vinyl acetate grafting on
 dyeability of chrome leather)
 RN 10139-51-2 HCAPLUS
 CN Nitric acid, cerium(4+) ammonium salt (6:1:2) (CA INDEX NAME)



● 1/6 Ce(IV)

● 1/3 NH₃

CC 45-2 (Industrial Organic Chemicals, Leather, Fats, and Waxes)
 Section cross-reference(s): 37
 ST leather vinyl acetate graft polymn dyeability
 IT leather
 (chrome; effect of vinyl acetate grafting on dyeability of)
 IT Dyeing
 Reactive dyeing
 pH
 (effect of vinyl acetate grafting on dyeability of chrome
 leather)
 IT Polymerization
 (graft, radical; effect of vinyl acetate grafting on dyeability of
 chrome leather)
 IT Polymerization catalysts

(graft, radical; in effect of vinyl acetate grafting on dyeability of chrome leather)

- IT Leather
(wet blue; effect of vinyl acetate grafting on dyeability of)
- IT 3734-67-6, C.I. Acid Red 1
RL: TEM (Technical or engineered material use); USES (Uses)
(Amecid Floxine 2GN, red dye; effect of vinyl acetate grafting on dyeing of chrome leather with)
- IT 17095-24-8, Remazol Black B
RL: TEM (Technical or engineered material use); USES (Uses)
(black reactive dye; effect of vinyl acetate grafting on dyeing of chrome leather with)
- IT 108-05-4DP, Vinyl acetate, polymers with leather, graft
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(effect of vinyl acetate grafting on dyeability of chrome leather)
- IT 10139-51-2, Ceric ammonium nitrate
RL: CAT (Catalyst use); USES (Uses)
(graft polymerization catalyst; in effect of vinyl acetate grafting on dyeability of chrome leather)
- REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 7 OF 24 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:465254 HCAPLUS Full-text

DOCUMENT NUMBER: 142:24862

TITLE: Physical and chemical study of domestic reactive dyes

AUTHOR(S): Zolina, L. I.; Bulgakova, I. V.; Kanbai, V. A.; Eliseeva, N. A.

CORPORATE SOURCE: MGUDT, Russia

SOURCE: Kozhevenno-Obuvnaya Promyshlennost (2004), (2), 48-50

CODEN: KOOPAJ; ISSN: 0023-4354

PUBLISHER: OOO "Arina"

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB Characteristics of reactive black azo dyes and their performance in leather dyeing are addressed. Dispersion composition, adsorption parameters, and diffusion into gelatine films are determined

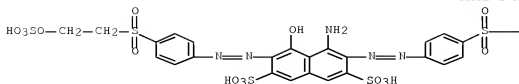
IT 17095-24-8, C.I. Reactive Black 5 802914-29-0, Reactive Black 3Sh

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

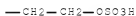
(phys. and chemical characterization of domestic black reactive azo dyes for leather)

RN 17095-24-8 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3,6-bis[2-[4-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]diazenyl]-, sodium salt (1:4) (CA INDEX NAME)

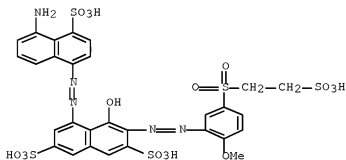


● 4 Na



RN 802914-29-0 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 5-[2-(5-amino-4-sulfo-1-naphthalenyl)diazenyl]-4-hydroxy-3-[2-[2-methoxy-5-[(2-sulfoethyl)sulfonyl]phenyl]diazenyl]-, sodium salt (1:4) (CA INDEX NAME)



● 4 Na

CC 45-2 (Industrial Organic Chemicals, Leather, Fats, and Waxes)

Section cross-reference(s): 41

ST reactive black azo dye leather

IT Leather

Reactive azo dyes

(phys. and chemical characterization of domestic black reactive azo dyes for leather)

IT 17095-24-8, C.I. Reactive Black 5 802914-29-0, Reactive

Black 3Sh

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(phys. and chemical characterization of domestic black reactive azo dyes for leather)

L31 ANSWER 8 OF 24 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2002:505067 HCAPLUS [Full-text](#)
 DOCUMENT NUMBER: 137:80276
 TITLE: Anionic azo dyes and their use on
 cotton and leather
 INVENTOR(S): Mazza, Jorge
 PATENT ASSIGNEE(S): Argent.
 SOURCE: U.S. Pat. Appl. Publ., 9 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20020083532	A1	20020704	US 2001-23962	20011218 <--
US 20060150345	A1	20060713	US 2004-881342	20040630 <--
US 20070289072	A1	20071220	US 2007-748371	20070514 <--
PRIORITY APPLN. INFO.:			AR 2000-106734	A 20001218 <--
			US 2001-23962	A2 20011218 <--
			US 2004-881342	B2 20040630 <--

OTHER SOURCE(S): MARPAT 137:80276

AB Anionic azo dyes are obtained which comprise at least one spacer arm bounded to their chemical structure. These anionic coloring agents may be depicted by CA-BE, wherein CA is an anionic coloring agent comprising at least 1 chromophore group and BE is the spacer arm, which has the chemical structure: $-(X-R-Z)r$, wherein X is a direct link or a group having the formula $-S(O)_s$, wherein s is 0-2; or $-NR1-$, wherein R1 is H or a C1-10-alkyl group; R is a C1-10 straight or branched alkylene group; Z is a polar group; and r is ≥ 1 . The invention also refers to coloring compns., which comprise at least one anionic coloring agent CA-BE in admixt. with anionic coloring agents which do not have spacer arms. The anionic coloring agents and the coloring compns. containing them may be used to dye cotton and wool substrates, regenerated cellulose, leather, cardboard, and paper. The introduction of spacer arms in the structure of the anionic coloring agents leads to modified anionic coloring agents, which differ from the known coloring agents in their dyeing properties such as strength, tone, and affinity, due to fixation modifications onto the substrate to be dyed. Examples were given for the preparation of acid, reactive, sulfur, and metalized dyes.

IT 1102416-75-0 1102416-76-1 1102416-77-2
 1102416-78-3

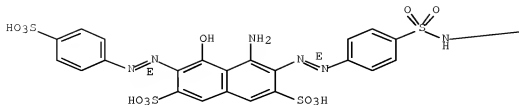
RL: PRPH (Prophetic)

(Anionic azo dyes and their use on cotton and leather)

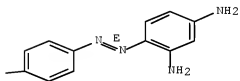
RN 1102416-75-0 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-3-[(1E)-2-[4-[[[4-(1E)-2-(2,4-diaminophenyl)diazenyl]phenyl]amino]sulfonyl]phenyl]diazenyl]-5-hydroxy-6-[(1E)-2-(4-sulfonylphenyl)diazenyl]- (CA INDEX NAME)

Double bond geometry as shown.



PAGE 1-B

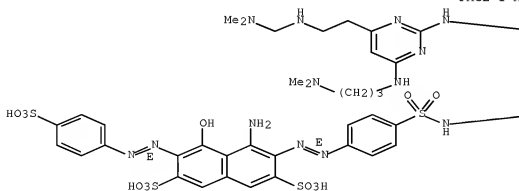


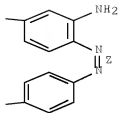
RN 1102416-76-1 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-3-[(1E)-2-[4-[[[4-[(1Z)-2-[2-amino-4-[[4-2-[(dimethylamino)methyl]amino]ethyl]-6-[3-(dimethylamino)propyl]amino]-2-pyrimidinyl]amino]phenyl]diazenyl]phenyl]amino)sulfonyl]phenyl]diazenyl]-5-hydroxy-6-[(1E)-2-(4-sulfonylphenyl)diazenyl]- (CA INDEX NAME)

Double bond geometry as shown.

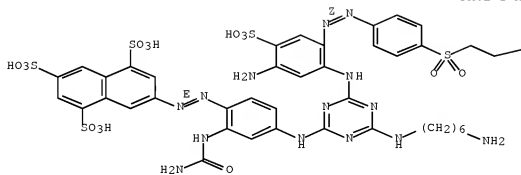
PAGE 1-A





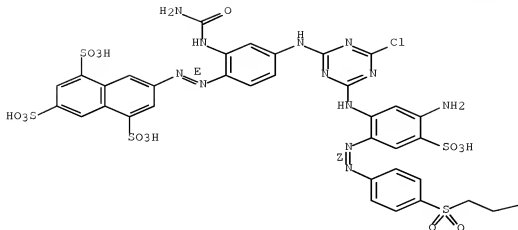
RN 1102416-77-2 HCAPLUS
CN INDEX NAME NOT YET ASSIGNED

Double bond geometry as shown.



RN 1102416-78-3 HCAPLUS
CN INDEX NAME NOT YET ASSIGNED

Double bond geometry as shown.

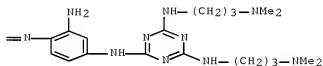
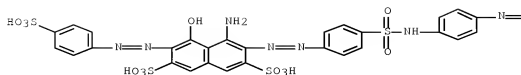

$$\text{—OSO}_3\text{H}$$

IT 440103-78-6P

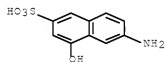
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acid dye for leather; production of anionic azo dyes with spacer arms)

RN 440103-78-6 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-3-[2-[4-[[[4-(2-amino-4-[[4,6-bis[[3-(dimethylamino)propyl]amino]-1,3,5-triazin-2-yl]amino]phenyl]diazenyl]phenyl]amino]sulfonyl]phenyl]diazenyl]-5-hydroxy-6-[2-(4-sulfophenyl)diazenyl]- (CA INDEX NAME)



IT 90-51-7, 6-Amino-4-hydroxy-2-naphthalenesulfonic acid
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (coupling and diazo component; production of anionic azo
 dyes with spacer arms)
 RN 90-51-7 HCAPLUS
 CN 2-Naphthalenesulfonic acid, 6-amino-4-hydroxy- (CA INDEX NAME)



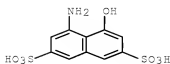
IT 88-63-1, m-Phenylenediamine-4-sulfonic acid 90-20-0,
 4-Amino-5-hydroxy-2,7-naphthalenedisulfonic acid 102-01-2,
 Acetoacetanilide 591-27-5, m-Aminophenol 25711-72-2,
 3-Ureidoaniline
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (coupling component; production of anionic azo dyes
 with spacer arms)
 RN 88-63-1 HCAPLUS
 CN Benzenesulfonic acid, 2,4-diamino- (CA INDEX NAME)



RN 90-20-0 HCAPLUS

11/628659

CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy- (CA INDEX NAME)



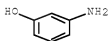
RN 102-01-2 HCAPLUS

CN Butanamide, 3-oxo-N-phenyl- (CA INDEX NAME)



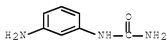
RN 591-27-5 HCAPLUS

CN Phenol, 3-amino- (CA INDEX NAME)



RN 25711-72-2 HCAPLUS

CN Urea, N-(3-aminophenyl)- (CA INDEX NAME)



IT 118-03-6, 2-Aminonaphthalene-3,6,8-trisulfonic acid

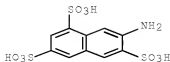
121-57-3 2494-89-5, 4-(2-Sulfatoethylsulfonyl)aniline

78696-32-9 440103-81-1

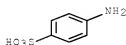
RL: RCT (Reactant); RACT (Reactant or reagent)
(diazo component; production of anionic azo dyes with
spacer arms)

RN 118-03-6 HCAPLUS

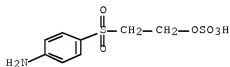
CN 1,3,6-Naphthalenetrisulfonic acid, 7-amino- (CA INDEX NAME)



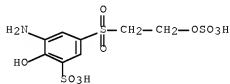
RN 121-57-3 HCAPLUS
 CN Benzenesulfonic acid, 4-amino- (CA INDEX NAME)



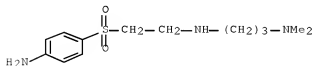
RN 2494-89-5 HCAPLUS
 CN Ethanol, 2-[(4-aminophenyl)sulfonyl]-, 1-(hydrogen sulfate) (CA INDEX NAME)



RN 78696-32-9 HCAPLUS
 CN Benzenesulfonic acid, 3-amino-2-hydroxy-5-[[2-(sulfooxy)ethyl]sulfonyl]- (CA INDEX NAME)



RN 440103-81-1 HCAPLUS
 CN 1,3-Propanediamine, N3-[2-[(4-aminophenyl)sulfonyl]ethyl]-N1,N1-dimethyl- (CA INDEX NAME)



IT 440103-80-0P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

11/628659

(metalized dye for leather; production of anionic azo dyes with spacer arms)

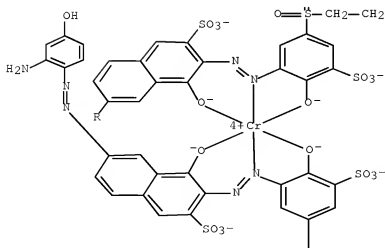
RN 440103-80-0 HCAPLUS

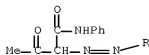
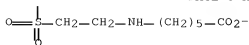
CN Chromate(6-), [6-[2-[3-[7-[(2-amino-4-hydroxyphenyl)azo]-1-(hydroxy- κ O)-3-sulfo-2-naphthalenyl]azo- κ N1]-4-(hydroxy- κ O)-5-sulfo-phenyl]sulfonyl]ethyl]amino]hexanoato(5-)] [6-[2-[4-(hydroxy- κ O)-3-[1-(hydroxy- κ O)-7-[2-oxo-1-[(phenylamino)carbonyl]propyl]azo]-3-sulfo-2-naphthalenyl]azo- κ N1]-5-sulfo-phenyl]sulfonyl]ethyl]amino]hexanoato(5-)]-, hexahydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



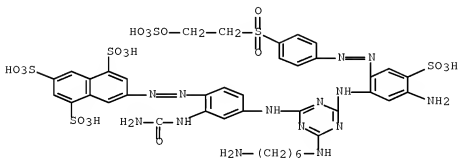


IT 440103-77-5P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(reactive dye for cotton; production of anionic azo dyes with spacer arms)

RN 440103-77-5 HCAPLUS

CN 1,3,5-Naphthalenetrisulfonic acid,
7-[2-[2-[(aminocarbonyl)amino]-4-[[4-[(6-aminohexyl)amino]-6-[[5-amino-4-sulfo-2-[2-[4-[2-(sulfoxy)ethyl)sulfonyl]phenyl]diazenyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]phenyl]diazenyl]- (CA INDEX NAME)



IT 60-32-2, s-Aminocaproic acid 108-45-2,

m-Phenylenediamine, reactions 108-77-0, Cyanuric chloride
109-55-7, N,N-Dimethyl-1,3-propanediamine 124-09-4,
Hexamethylenediamine, reactions

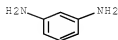
RL: RCT (Reactant); RACT (Reactant or reagent)
(starting material; production of anionic azo dyes with spacer arms)

RN 60-32-2 HCAPLUS

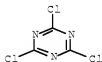
CN Hexanoic acid, 6-amino- (CA INDEX NAME)



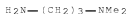
RN 108-45-2 HCAPLUS
 CN 1,3-Benzenediamine (CA INDEX NAME)



RN 108-77-0 HCAPLUS
 CN 1,3,5-Triazine, 2,4,6-trichloro- (CA INDEX NAME)



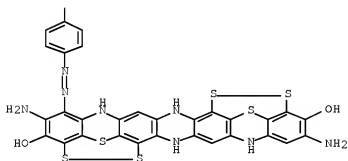
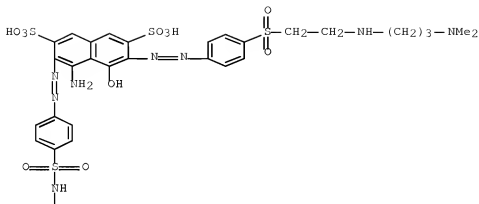
RN 109-55-7 HCAPLUS
 CN 1,3-Propanediamine, N1,N1-dimethyl- (CA INDEX NAME)



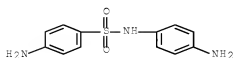
RN 124-09-4 HCAPLUS
 CN 1,6-Hexanediamine (CA INDEX NAME)



IT 440103-79-7P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (sulfur dye for leather; production of anionic azo dyes with spacer arms)
 RN 440103-79-7 HCAPLUS
 CN 2,7-Naphthalenedisulfonic acid, 4-amino-3-[2-[4-[[[4-[(2,11-diamino-7,9,16,18-tetrahydro-3,12-dihydroxy-4,6:13,15-diepidithiopyrazino[2,3-b:5,6-b']diphenothiazin-1-yl)azo]phenyl]amino]sulfonyl]phenyl]diazenyl]-6-[2-[4-[[[2-[[[3-(dimethylamino)propyl]amino]ethyl]sulfonyl]phenyl]diazenyl]-5-hydroxy- (CA INDEX NAME)



IT 16803-97-7, 4,4'-Diaminosulfanilide
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (tetrazo component; production of anionic azo dyes with
 spacer arms)
 RN 16803-97-7 HCAPLUS
 CN Benzenesulfonamide, 4-amino-N-(4-aminophenyl)- (CA INDEX NAME)



IC ICM D06P003-32
 ICS C09B001-00; D06P001-00; C09B047-04; C09B003-00; C09B005-00;
 C09B006-00

INCL 008436000

CC 41-3 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)
Section cross-reference(s): 28, 40, 45

ST anionic azo dye spacer arm prodn use

IT Azo dyes
(acid; production of anionic azo dyes with spacer arms for leather and cotton)

IT Textiles
(cotton; production of anionic azo dyes with spacer arms for leather and cotton)

IT Leather
(production of anionic azo dyes with spacer arms for leather and cotton)

IT 1102416-75-0 1102416-76-1 1102416-77-2
1102416-78-3
RL: PRPH (Prophetic)
(Anionic azo dyes and their use on cotton and leather)

IT 440103-78-6P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acid dye for leather; production of anionic azo dyes with spacer arms)

IT 90-51-7, 6-Amino-4-hydroxy-2-naphthalenesulfonic acid
RL: RCT (Reactant); RACT (Reactant or reagent)
(coupling and diazo component; production of anionic azo dyes with spacer arms)

IT 88-63-1, m-Phenylenediamine-4-sulfonic acid 90-20-0, 4-Amino-5-hydroxy-2,7-naphthalenedisulfonic acid 102-01-2, Acetoacetanilide 591-27-5, m-Aminophenol 1326-82-5, C.I. Sulfur Black 1 25711-72-2, 3-Ureidoaniline
RL: RCT (Reactant); RACT (Reactant or reagent)
(coupling component; production of anionic azo dyes with spacer arms)

IT 118-03-6, 2-Aminonaphthalene-3,6,8-trisulfonic acid 121-57-3 2494-89-5, 4-(2-Sulfatoethylsulfonyl)aniline 78696-32-9 440103-81-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(diazo component; production of anionic azo dyes with spacer arms)

IT 440103-80-0P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(metalized dye for leather; production of anionic azo dyes with spacer arms)

IT 440103-77-5P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(reactive dye for cotton; production of anionic azo dyes with spacer arms)

IT 60-32-2, ε-Aminocaproic acid 108-45-2, m-Phenylenediamine, reactions 108-77-0, Cyanuric chloride 109-55-7, N,N-Dimethyl-1,3-propanediamine 124-09-4, Hexamethylenediamine, reactions 17593-70-3, Chromium acetate
RL: RCT (Reactant); RACT (Reactant or reagent)
(starting material; production of anionic azo dyes with spacer arms)

IT 440103-79-7P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material

use); PREP (Preparation); USES (Uses)
(sulfur dye for leather; production of anionic azo dyes with spacer arms)

IT 16803-97-7, 4,4'-Diaminosulfanilide
RL: RCT (Reactant); RACT (Reactant or reagent)
(tetrazo component; production of anionic azo dyes with spacer arms)

L31 ANSWER 9 OF 24 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2001:265511 HCAPLUS Full-text

DOCUMENT NUMBER: 134:297164

TITLE: Reactive dyes with high exhaustion and fixation values

INVENTOR(S): Broadbent, Peter Jeffrey; Lewis, David Malcolm; Genain, Gilles Yves Marie Fernand; He, Wei Dong; Yousaf, Taher Iqbal

PATENT ASSIGNEE(S): The Procter & Gamble Company, USA

SOURCE: PCT Int. Appl., 43 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001025338	A1	20010412	WO 2000-US26975	20000929 <--
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
EP 1218453	A1	20020703	EP 2000-967177	20000929 <--
EP 1218453	B1	20050511		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL			
JP 2003511511	T	20030325	JP 2001-528497	20000929 <--
JP 3971184	B2	20070905		
CN 1195804	C	20050406	CN 2000-816561	20000929 <--
AT 295394	T	20050515	AT 2000-967177	20000929 <--
US 6790943	B1	20040914	US 2002-89340	20020327 <--
MX 2002003288	A	20021004	MX 2002-3288	20020401 <--
PRIORITY APPLN. INFO.:			GB 1999-23328	A 19991001 <--
			GB 2000-6969	A 20000322 <--
			GB 2000-9842	A 20000425 <--
			WO 2000-US26975	W 20000929 <--

OTHER SOURCE(S): MARPAT 134:297164

AB A dye comprises (a) ≥ 1 chromophore and (b) ≥ 1 fiber-reactive group SO₂C₂H₄Y, where Y is derived from a hydrated aldehyde (especially a hydrolyzed sugar), a hydrated ketone or orthoformic acid, and is attached via a hemiacetal linkage. The dyes have high exhaustion values, high fixation values and high efficiency values and show significant improvements in terms of reducing the amount of spent dye in effluent, increasing dye affinity to the substrate, increasing the fraction of dye-substrate covalent bonding, increasing the ability to dye substrates at room temperature, decreasing the amount of dye that is removed during the post-dyeing soaping-off process and reduction of staining of

adjacent white fabrics during laundering. In addition, the dyes of this structure provide more intense dyeings and require less salt for dyeing cotton substrates. They are conveniently prepared, e.g., by reaction of $\text{SO}_2\text{CH}_2\text{CH}_2\text{SO}_3\text{H}$ groups in conventional reactive dyes or intermediates with, e.g., acid-hydrolyzed glucose. A dye thus prepared from Remazol Red RB and glucose showed 97.32% exhaustion and 97.21% fixation in dyeing cotton at 50° .

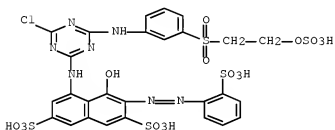
IT 23354-52-1DP, Sumifix Supra Brilliant Red 2BF, reaction products with acid-hydrolyzed glucose 145017-98-7DP, Remazol Red RB, reaction products with acid-hydrolyzed glucose or sucrose or orthoformic acid 333764-41-3P 333764-43-5P 333800-01-4P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(preparation of reactive dyes with high exhaustion and fixation values)

RN 23354-52-1 HCAPLUS

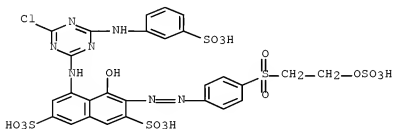
CN 2,7-Naphthalenedisulfonic acid, 5-[[4-chloro-6-[[3-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-4-hydroxy-3-[2-(2-sulphophenyl)diazonyl]-, sodium salt (1:4) (CA INDEX NAME)



● 4 Na

RN 145017-98-7 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 5-[[4-chloro-6-[(3-sulphophenyl)amino]-1,3,5-triazin-2-yl]amino]-4-hydroxy-3-[2-[4-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]diazonyl]-, sodium salt (1:4) (CA INDEX NAME)



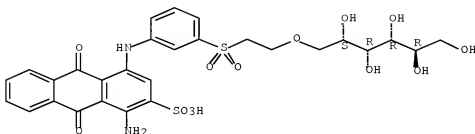
● 4 Na

RN 333764-41-3 HCAPLUS

11/628659

CN D-Glucitol, 1-O-[2-[[3-[(4-amino-9,10-dihydro-9,10-dioxo-3-sulfo-1-anthracenyl)aminophenyl]sulfonyl]ethyl]-, monosodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

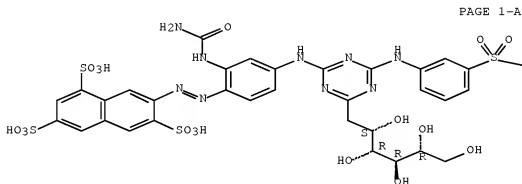


RN 333764-43-5 HCAPLUS

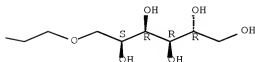
CN D-Glucitol, 1-O-[2-[[3-[[4-[[3-[(aminocarbonyl)amino]-4-[(3,6,8-trisulfo-2-naphthalenyl)azo]phenyl]amino]-6-(1-deoxy-D-glucitol-1-yl)-1,3,5-triazin-2-yl]amino]phenyl]sulfonyl]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.



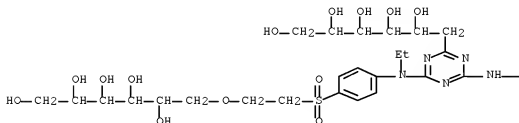
PAGE 1-B



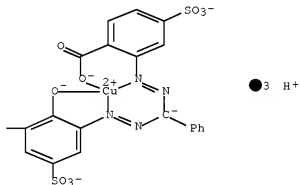
RN 333800-01-4 HCAPLUS

CN Cuprate(3-), [1-O-[2-[[4-[[4-[[3-[[[2-(carboxy-κO)-5-sulphophenyl]azo-κN2]phenylmethyl]azo-κN1]-2-(hydroxy-κO)-5-sulphophenyl]amino]-6-(1-deoxy-D-glucitol-1-yl)-1,3,5-triazin-2-yl]ethylamino]phenyl]sulfonyl]ethyl]-D-glucitolato(5-)]-, trihydrogen, (SP-4-3)- (9CI) (CA INDEX NAME)

PAGE 1-A



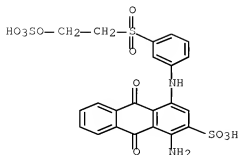
PAGE 1-B



IT 2580-78-1, Remazol Brilliant Blue R Special 86293-57-4, Sumifix Supra Yellow 3RF 89933-65-3, Sumifix Supra Blue BRF RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of reactive dyes with high exhaustion and fixation values)

RN 2580-78-1 HCAPLUS

CN 2-Anthracenesulfonic acid, 1-amino-9,10-dihydro-9,10-dioxo-4-[[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]amino]-, sodium salt (1:2) (CA INDEX NAME)

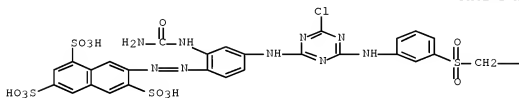


●2 Na

RN 86293-57-4 HCAPLUS

CN 1,3,6-Naphthalenetrisulfonic acid,
7-[2-[2-[(aminocarbonyl)amino]-4-[[4-chloro-6-[[3-[[2-(sulfooxy)ethyl)sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]phenyl]diazenyl]- (CA INDEX NAME)

PAGE 1-A

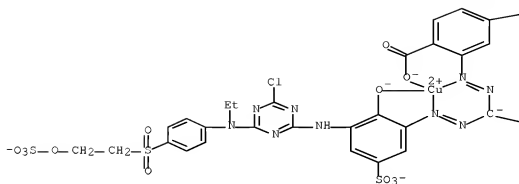


PAGE 1-B

—CH₂—OSO₃H

RN 89933-65-3 HCAPLUS

CN Cuprate(4-), [2-[2-[[2-[3-[[4-chloro-6-[ethyl[4-[[2-(sulfooxy)ethyl)sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-2-(hydroxy-κO)-5-sulfophenyl]diazenyl-κN2]phenylmethyl]diazenyl-κN1]-4-sulfobenzoato(6-)-κO]-, hydrogen (1:4), (SP-4-3)- (CA INDEX NAME)



—SO₃⁻

●₄ H⁺

—Ph

- IC ICM C09B062-78
ICS D06P003-00; D06P001-38; C09B062-503; C09B062-44
- CC 41-1 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)
Section cross-reference(s): 40, 45, 62
- ST reactive dye vinyl sulfone precursor; acid hydrolyzed sugar leaving group
- IT Carbohydrates, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(aldoses, hydrated; preparation of reactive dyes with high exhaustion and fixation values)
- IT Textiles
(cotton; reactive dyes having high exhaustion and fixation values for)
- IT Hair preparations
(dyes; reactive dyes having high exhaustion and fixation values)
- IT Carbohydrates, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(ketoses, hydrated; preparation of reactive dyes with high exhaustion and fixation values)
- IT Dyeing
(of hair or leather or textile fibers with reactive dyes having high exhaustion and fixation values)

IT Reactive dyes
(preparation of reactive dyes with high exhaustion and fixation values)

IT Leather
Silk
Wool
(reactive dyes having high exhaustion and fixation values for)

IT Polyamide fibers, miscellaneous
RL: MSC (Miscellaneous)
(reactive dyes having high exhaustion and fixation values for)

IT 12236-86-1DP, Remazol Turquoise Blue G, reaction products with acid-hydrolyzed glucose or sucrose 23354-52-1DP, Sumifix Supra Brilliant Red 2BF, reaction products with acid-hydrolyzed glucose 115682-09-2DP, Sumifix Supra Turquoise BlueBGF, reaction products with acid-hydrolyzed glucose 140876-11-5DP, Cibacron Red C2G, reaction products with acid-hydrolyzed glucose 140876-15-9DP, Remazol Yellow 3RS, reaction products with acid-hydrolyzed glucose or sucrose 145017-98-7DP, Remazol Red RB, reaction products with acid-hydrolyzed glucose or sucrose or orthoformic acid 149315-82-2DP, Cibacron Blue CR, reaction products with acid-hydrolyzed glucose 195739-93-6DP, Cibacron Yellow C2R, reaction products with acid-hydrolyzed glucose 333764-41-3P 333764-43-5P 333800-01-4P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(preparation of reactive dyes with high exhaustion and fixation values)

IT 50-69-1, Ribose 50-99-7, Glucose, reactions 57-48-7, Fructose, reactions 57-50-1, Sucrose, reactions 58-86-6, Xylose, reactions 59-23-4, Galactose, reactions 147-81-9, Arabinose 463-78-5, Orthoformic acid 533-67-5, Deoxyribose 2580-78-1, Remazol Brilliant Blue R Special 3458-28-4, Mannose 3615-41-6, Rhamnose 5987-68-8, Altrose 6038-51-3, Allose 30077-17-9, Talose 86293-57-4, Sumifix Supra Yellow 3RF 89933-65-3, Sumifix Supra Blue BRF
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of reactive dyes with high exhaustion and fixation values)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 10 OF 24 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2001:265509 HCAPLUS Full-text
DOCUMENT NUMBER: 134:282130
TITLE: Reactive dye compounds and their use

INVENTOR(S): Lewis, David Malcolm; He, Dong Wei; Yousaf, Taher Iqbal; Genain, Gilles Yves Marie Fernand

PATENT ASSIGNEE(S): The Procter & Gamble Company, USA
SOURCE: PCT Int. Appl., 22 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001025336	A1	20010412	WO 2000-US26911	20000929 <--

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
 CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
 HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
 LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
 SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
 YU, ZA, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
 CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1218451 A1 20020703 EP 2000-965537 20000929 <--

EP 1218451 B1 20031210

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL

JP 2003511509 T 20030325 JP 2001-528495 20000929 <--

AT 256167 T 20031215 AT 2000-965537 20000929 <--

CN 1182201 C 20041229 CN 2000-816522 20000929 <--

US 6736864 B1 20040518 US 2002-89334 20020327 <--

PRIORITY APPLN. INFO.: GB 1999-23332 A 19991001 <--

WO 2000-US26911 W 20000929 <--

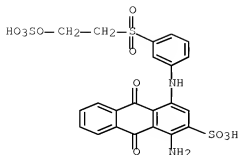
OTHER SOURCE(S): MARPAT 134:282130

AB A reactive dye compound comprises: (a) at least one chromophore moiety; (b) at least one SO₂C₂H₄ group which is attached to the chromophore moiety either directly via the sulfur atom of the SO₂C₂H₄ group or via a linking group; characterized in that at least one SO₂C₂H₄ group is substituted on its terminal carbon atom with at least one Y group wherein Y is a phosphonate or borate derivative. The compds. herein have high exhaustion, fixation, and efficiency values and show significant improvements in terms of reducing spent dyes in the effluent, increasing dye affinity to the substrate, increasing the dye-substrate covalent bonding, increasing the ability to dye substrates at room temperature, decreasing the amount of dye removed during the post dyeing soaping off process, and reducing the staining of adjacent white fabrics. In addition, the dye compds. provide more intense dyeings and require lower levels of salt for dyeing cotton substrates. An example was given in which the reaction product of Remazol Brilliant Blue R Special and acetodiphosphonic acid was prepared and used to dye cotton deep blue.

IT 2580-78-IDP, Remazol Brilliant Blue R Special, reaction products with acetodiphosphonic acid
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (blue dye; production of reactive dyes with improved application and use properties)

RN 2580-78-1 HCAPLUS

CN 2-Anthracesulfonic acid, 1-amino-9,10-dihydro-9,10-dioxo-4-[[3-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-, sodium salt (1:2) (CA INDEX NAME)



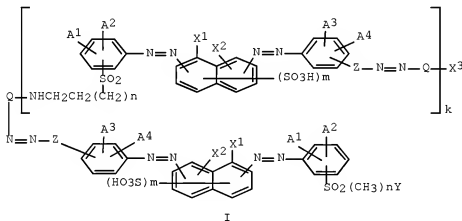
● 2 Na

- IC ICM C09B062-022
ICS D06P003-00; D06P001-38; C09B062-503; C09B062-443
- CC 41-4 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)
Section cross-reference(s): 40, 45, 62
- ST acetodiphosphonic acid treated reactive dye prodn
- IT Buffers
(in reactive dyeing with acetodiphosphonic acid-treated dyes)
- IT Textiles
(polyamide-wool; reactive dyeing with acetodiphosphonic acid-treated dyes)
- IT Cotton fibers
Hair
Leather
Silk
Wool
(reactive dyeing with acetodiphosphonic acid-treated dyes)
- IT Polyamide fibers, processes
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(reactive dyeing with acetodiphosphonic acid-treated dyes)
- IT Reactive dyes
(vinyl sulfone; production of reactive dyes with improved application and use properties)
- IT Reactive dyeing
(with prepared acetodiphosphonic acid-treated vinyl sulfone dyes)
- IT 2580-78-IDF, Remazol Brilliant Blue R Special, reaction products with acetodiphosphonic acid 2809-21-4DP, 1-Hydroxyethylidenediphosphonic acid, reaction products with Remazol Brilliant Blue R Special
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(blue dye; production of reactive dyes with improved application and use properties)
- IT 77-92-9, Citric acid, uses 110-16-7, Maleic acid, uses 110-17-8, Fumaric acid, uses 6915-15-7, Malic acid
RL: NUU (Other use, unclassified); USES (Uses)
(buffer in reactive dyeing with acetodiphosphonic acid-treated dyes)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 11 OF 24 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1999:791820 HCAPLUS Full-text
 DOCUMENT NUMBER: 132:23858
 TITLE: Tris- and polyazo reactive
 dyes, their mixtures, their production and
 uses
 INVENTOR(S): Patsch, Manfred; Scholz, Gerhard
 PATENT ASSIGNEE(S): BASF A.-G., Germany
 SOURCE: Ger. Offen., 18 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

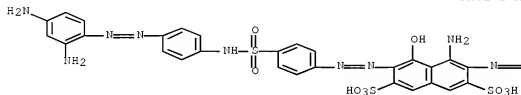
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19825202	A1	19991209	DE 1998-19825202	19980605 <--
WO 9964520	A1	19991216	WO 1999-EP3535	19990522 <--
W: BR, IN, KR, MX, TR, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1086180	A1	20010328	EP 1999-955488	19990522 <--
R: DE, ES, GB, IT				
PRIORITY APPLN. INFO.:			DE 1998-19825202	A 19980605 <--
			WO 1999-EP3535	W 19990522 <--
OTHER SOURCE(S):		MARPAT 132:23858		
GI				



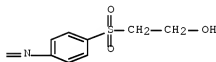
AB Vinyl sulfone reactive azo dyes [I; A1, A2, A3, A4 = H, sulfo; Q = aromatic or heterocyclic connecting group; X1, X2 = 1 each of hydroxy or amino/substituted amino; X3 = H, amino; Y = vinyl or group convertible thereto; Z = direct bond or organic connecting group; k = 0 or (when X3 = amino) 1-4; m = 1, 2; n = 0, 1] are obtained which have good substantivity, especially on leather. In an example, p-(2-hydroxyethylsulfonfyl)aniline-1-hydroxy-8-amino-3,6-naphthalenedisulfonic acid was prepared and coupled with tetrazotized 4,4'-diaminodiphenylsulfamide; coupling of the product with m-phenylenediamine gave a black dye (λ_{\max} 399, 472, 608 nm).

IT 252011-02-2P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (black dye; production of polyazo reactive dyes)
 RN 252011-02-2 HCAPLUS
 CN 2,7-Naphthalenedisulfonic acid, 4-amino-6-[2-[4-[[[4-[2-(2,4-diaminophenyl)diazenyl]phenyl]amino]sulfonyl]phenyl]diazenyl]-5-hydroxy-3-[2-[4-[(2-hydroxyethyl)sulfonyl]phenyl]diazenyl]- (CA INDEX NAME)

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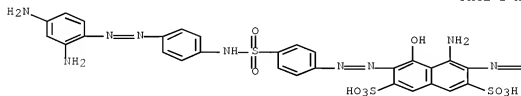


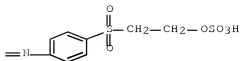
PAGE 1-B



IT 252011-06-6P 252011-07-7P 252011-08-8P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (black dye; production of polyazo reactive dyes for leather)
 RN 252011-06-6 HCAPLUS
 CN 2,7-Naphthalenedisulfonic acid, 4-amino-6-[2-[4-[[[4-[2-(2,4-diaminophenyl)diazenyl]phenyl]amino]sulfonyl]phenyl]diazenyl]-5-hydroxy-3-[2-[4-[(2-(sulfooxy)ethyl)sulfonyl]phenyl]diazenyl]- (CA INDEX NAME)

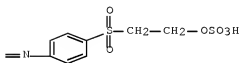
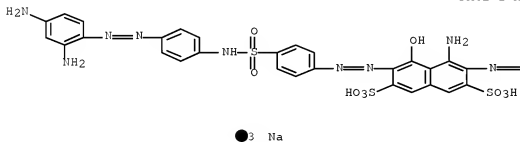
PAGE 1-A





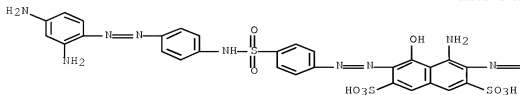
RN 252011-07-7 HCAPLUS

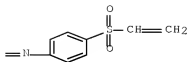
CN 2,7-Naphthalenedisulfonic acid, 4-amino-6-[2-[4-[[[2-(2,4-diaminophenyl)diazenyl]phenyl]amino]sulfonyl]phenyl]diazenyl]-5-hydroxy-3-[2-[4-[2-(sulfooxy)ethyl]sulfonyl]phenyl]diazenyl]-, sodium salt (1:3)
(CA INDEX NAME)



RN 252011-08-8 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-6-[2-[4-[[[2-(2,4-diaminophenyl)diazenyl]phenyl]amino]sulfonyl]phenyl]diazenyl]-3-[2-[4-(ethenylsulfonyl)phenyl]diazenyl]-5-hydroxy- (CA INDEX NAME)



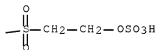
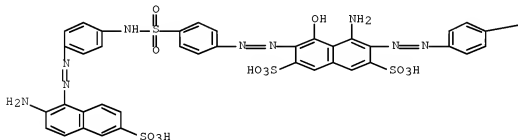


IT 252011-13-5P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(blue dye; production of polyazo reactive dyes for leather)

RN 252011-13-5 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-6-[2-[4-[[[4-[2-(2-amino-6-sulfo-1-naphthalenyl)diazenyl]phenyl]amino]sulfonyl]phenyl]diazenyl]-5-hydroxy-3-[2-[4-[2-(sulfooxy)ethyl]sulfonyl]phenyl]diazenyl]- (CA INDEX NAME)



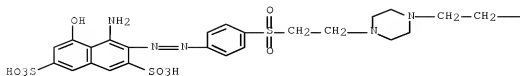
IT 252011-15-7P 252011-16-8P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(coupling component; production of polyazo reactive dyes)

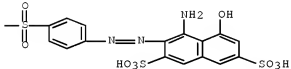
RN 252011-15-7 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 3,3'-[1,4-piperazinediyl]bis[2,1-ethanediylsulfonyl-4,1-phenyleneazo]bis[4-amino-5-hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-A

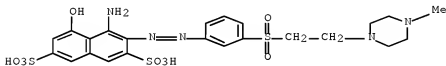


PAGE 1-B



RN 252011-16-8 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[2-[3-[[2-(4-methyl-1-piperazinyl)ethyl]sulfonyl]phenyl]diazenyl]- (CA INDEX NAME)



IT 90-20-0 108-45-2, 1,3-Benzenediamine, reactions

119-18-6 2243-67-6, 2,6-Diaminonaphthalene

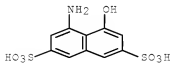
13269-73-3

RL: RCT (Reactant); RACT (Reactant or reagent)

(coupling component; production of polyazo reactive dyes)

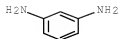
RN 90-20-0 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy- (CA INDEX NAME)



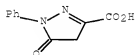
RN 108-45-2 HCAPLUS

CN 1,3-Benzenediamine (CA INDEX NAME)



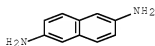
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CN 1H-Pyrazole-3-carboxylic acid, 4,5-dihydro-5-oxo-1-phenyl- (CA INDEX NAME)



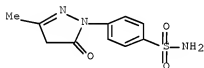
RN 2243-67-6 HCAPLUS

CN 2,6-Naphthalenediamine (CA INDEX NAME)



RN 13269-73-3 HCAPLUS

CN Benzenesulfonamide, 4-(4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-1-yl)- (CA INDEX NAME)

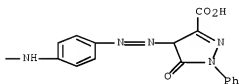
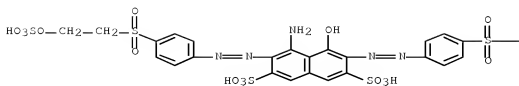


IT 252011-09-9P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (dark green dye; production of polyazo reactive dyes for leather)

RN 252011-09-9 HCAPLUS

CN 1H-Pyrazole-3-carboxylic acid, 4-[2-[4-[[[4-[2-[8-amino-1-hydroxy-3,6-disulfo-7-[2-[4-[[[2-(sulfooxy)ethyl]sulfonyl]phenyl]diazenyl]-2-naphthalenyl]diazenyl]phenyl]sulfonyl]amino]phenyl]diazenyl]-4,5-dihydro-5-oxo-1-phenyl- (CA INDEX NAME)

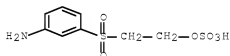


IT 2494-88-4, 3-(2-Sulfatoethylsulfonyl)aniline 2494-89-5,
p-(2-Sulfatoethylsulfonyl)aniline 5246-58-2,
p-(2-Hydroxyethylsulfonyl)aniline

RL: RCT (Reactant); RACT (Reactant or reagent)
(diazo component; production of polyazo reactive
dyes)

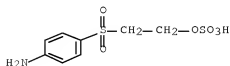
RN 2494-88-4 HCAPLUS

CN Ethanol, 2-[(3-aminophenyl)sulfonyl]-, 1-(hydrogen sulfate) (CA INDEX
NAME)



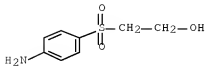
RN 2494-89-5 HCAPLUS

CN Ethanol, 2-[(4-aminophenyl)sulfonyl]-, 1-(hydrogen sulfate) (CA INDEX
NAME)



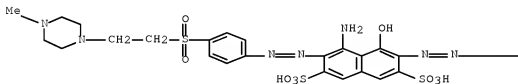
RN 5246-58-2 HCAPLUS

CN Ethanol, 2-[(4-aminophenyl)sulfonyl]- (CA INDEX NAME)

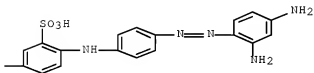


IT	252011-03-3P 252011-04-4P 252011-05-5P RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (dye; production of polyazo reactive dyes)
RN	252011-03-3 HCAPLUS
CN	2,7-Naphthalenedisulfonic acid, 4-amino-6-[2-[4-[[4-(2-(2,4- diaminophenyl)diazenyl]phenyl)amino]-3-sulphophenyl]diazenyl]-5-hydroxy-3- [2-[4-[[2-(4-methyl-1-piperazinyl)ethyl]sulfonyl]phenyl]diazenyl]- (CA INDEX NAME)

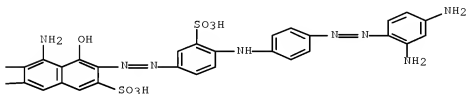
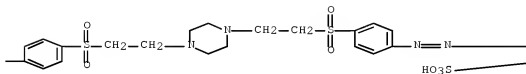
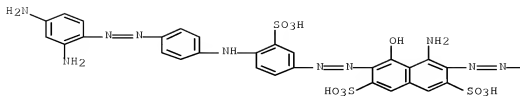
PAGE 1-A



PAGE 1-B

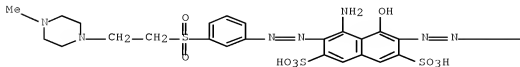


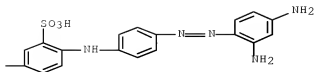
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RN 252011-05-5 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-6-[2-[4-[[4-[2-(2,4-diaminophenyl)diazenyl]phenyl]amino]-3-sulfonylphenyl]diazenyl]-5-hydroxy-3-[2-[3-[[2-(4-methyl-1-piperazinyl)ethyl]sulfonyl]phenyl]diazenyl]- (CA INDEX NAME)





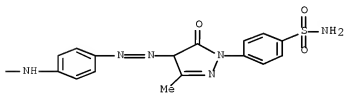
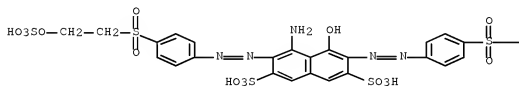
IT 252011-10-2P 252011-11-3P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(green dye; production of polyazo reactive dyes for leather)

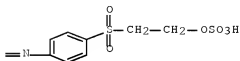
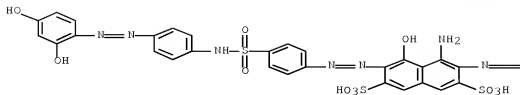
RN 252011-10-2 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-6-[2-[4-[[[4-[2-[1-[4-(aminosulfonyl)phenyl]-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]diazenyl]phenyl]amino]sulfonyl]phenyl]diazenyl]-5-hydroxy-3-[2-[4-[(2-(sulfoxy)ethyl)sulfonyl]phenyl]diazenyl]- (CA INDEX NAME)

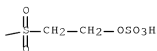
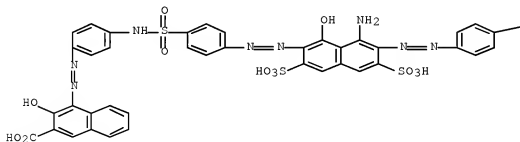


RN 252011-11-3 HCAPLUS

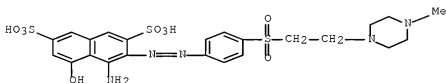
CN 2,7-Naphthalenedisulfonic acid, 4-amino-6-[2-[4-[[[4-[2-(2,4-dihydroxyphenyl)diazenyl]phenyl]amino]sulfonyl]phenyl]diazenyl]-5-hydroxy-3-[2-[4-[(2-(sulfoxy)ethyl)sulfonyl]phenyl]diazenyl]- (CA INDEX NAME)



IT 252011-12-4P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (navy blue dye; production of polyazo reactive dyes for leather)
 RN 252011-12-4 HCAPLUS
 CN 2-Naphthalenecarboxylic acid, 4-[2-[4-[[[4-[2-[8-amino-1-hydroxy-3,6-disulfo-7-[2-[4-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]diazenyl]-2-naphthalenyl]diazenyl]phenyl]sulfonyl]amino]phenyl]diazenyl]-3-hydroxy-(CA INDEX NAME)



IT 252011-14-6P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
 (Reactant or reagent)
 (red coupling component; production of polyazo reactive
 dyes)
 RN 252011-14-6 HCAPLUS
 CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[2-[4-[[2-(4-methyl-1-
 piperazinyl)ethyl]sulfonyl]phenyl]diazenyl]- (CA INDEX NAME)



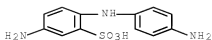
IT 109-01-3, N-Methylpiperazine 110-85-0, Piperazine,
 reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (starting material; production of polyazo reactive
 dyes)
 RN 109-01-3 HCAPLUS
 CN Piperazine, 1-methyl- (CA INDEX NAME)



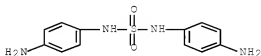
RN 110-85-0 HCAPLUS
 CN Piperazine (CA INDEX NAME)



IT 119-70-0 106003-92-3, 4,4'-Diaminodiphenylsulfamide
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (tetrazo component; production of polyazo reactive
 dyes)
 RN 119-70-0 HCAPLUS
 CN Benzenesulfonic acid, 5-amino-2-[(4-aminophenyl)amino]- (CA INDEX NAME)



RN 106003-92-3 HCAPLUS
 CN Sulfamide, N,N'-bis(4-aminophenyl)- (CA INDEX NAME)



IC ICM C09B062-513
 ICS C09B035-38; C09B043-32; C09B067-22; D06P003-32; D06P001-384;
 C07C309-50
 ICA D06P003-10; D06P003-66; C07C317-32
 CC 41-3 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic
 Sensitizers)
 Section cross-reference(s): 45
 ST polyazo reactive dye prodn leather
 IT Reactive dyeing
 (of leather and other substrates with prepared polyazo
 dyes)
 IT Leather
 (production of polyazo reactive dyes for)
 IT Reactive azo dyes
 (vinyl sulfone; production of polyazo reactive
 dyes for leather)
 IT 252011-02-2P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material
 use); PREP (Preparation); USES (Uses)
 (black dye; production of polyazo reactive
 dyes)
 IT 252011-06-6P 252011-07-7P 252011-08-8P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material
 use); PREP (Preparation); USES (Uses)
 (black dye; production of polyazo reactive
 dyes for leather)
 IT 252011-13-5P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material
 use); PREP (Preparation); USES (Uses)
 (blue dye; production of polyazo reactive
 dyes for leather)
 IT 252011-15-7P 252011-16-8P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
 (Reactant or reagent)
 (coupling component; production of polyazo reactive
 dyes)
 IT 90-20-0 92-70-6, 3-Hydroxy-2-naphthalenecarboxylic acid
 108-45-2, 1,3-Benzenediamine, reactions 108-46-3,
 1,3-Benzenediol, reactions 119-18-6 2243-67-6,
 2,6-Diaminonaphthalene 13269-73-3

- RL: RCT (Reactant); RACT (Reactant or reagent)
(coupling component; production of polyazo reactive dyes)
- IT 252011-09-9P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(dark green dye; production of polyazo reactive dyes for leather)
- IT 2494-88-4, 3-(2-Sulfatoethylsulfonyl)aniline 2494-89-5, p-(2-Sulfatoethylsulfonyl)aniline 5246-58-2, p-(2-Hydroxyethylsulfonyl)aniline
RL: RCT (Reactant); RACT (Reactant or reagent)
(diazo component; production of polyazo reactive dyes)
- IT 252011-03-3P 252011-04-4P 252011-05-5P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(dye; production of polyazo reactive dyes)
- IT 252011-10-2P 252011-11-3P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(green dye; production of polyazo reactive dyes for leather)
- IT 252011-12-4P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(navy blue dye; production of polyazo reactive dyes for leather)
- IT 252011-14-6P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(red coupling component; production of polyazo reactive dyes)
- IT 109-01-3, N-Methylpiperazine 110-85-0, Piperazine, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(starting material; production of polyazo reactive dyes)
- IT 119-70-0 106003-92-3, 4,4'-Diaminodiphenylsulfamide
RL: RCT (Reactant); RACT (Reactant or reagent)
(tetrazo component; production of polyazo reactive dyes)

L31 ANSWER 12 OF 24 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1999:659462 HCAPLUS Full-text
DOCUMENT NUMBER: 131:287742
TITLE: Reactive dyes and their use
INVENTOR(S): Brock, Earl David; Lewis, David Malcolm; Yousaf, Taher Iqbal
PATENT ASSIGNEE(S): The Procter & Gamble Company, USA
SOURCE: PCT Int. Appl., 82 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 1999-US7293 W 19990401 <--

OTHER SOURCE(S): MARPAT 131:287742

AB Reactive dyes are disclosed comprising: (a) at least one chromophore moiety, (b) at least one nitrogen-containing heterocycle, (c) a linking group to link each chromophore moiety to each nitrogen-containing heterocycle; characterized in that at least one nitrogen-containing heterocycle is substituted with at least one thio derivative and at least one quaternized nitrogen derivative. The reactive dyes have high exhaustion and fixation values, particularly on cellulosic substrates such as cotton, and show significant improvements in terms of reducing spent dyes in effluent, increasing dye affinity to the substrate, increasing the dye-substrate covalent bonding, increasing the ability to dye substrates at room temperature, decreasing the amount of dye that is removed during the post dyeing "soaping off process" and therefore simplifying the post dyeing "soaping off process" traditionally associated with dyeing cotton with fiber reactive dyes, and reduction of staining of adjacent white fabrics. In addition, the prepared dyes provide more intense dyeing and require less levels of salt for dyeing cotton substrates. In an example, Procion Red MX-8B is treated with mercaptoacetic acid and then isonicotinic acid to give a dye.

IT 55-22-IDP, Isonicotinic acid, reaction products with halogen-containing dyes and thiols 59-67-6DP, Nicotinic acid, reaction products with halogen-containing dyes and thiols 108-77-0DP, Cyanuric chloride, reaction products with sulfatoethylsulfonylaniline, halogen-containing dyes, thiols and amines 280-57-9DP, DABCO, reaction products with halogen-containing dyes and thiols 1118-68-9DP

11/628659

, Dimethylaminoacetic acid, reaction products with halogen-containing dyes and thiols 2494-89-5DP, 4-(2-Sulfatoethylsulfonyl)aniline, reaction products with cyanuric chloride, halogen-containing dyes, thiols and amines 57583-69-4DP, Procion Red MX 8B, reaction products with thiols and amines 246255-73-2P 246255-74-3P 246255-76-5P 246255-78-7DP, reaction products with halogen-containing dyes and amines

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(dye; production of nitrogen heterocycle reactive dyes containing thio and quaternary ammonium groups)

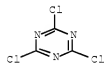
RN 55-22-1 HCAPLUS
CN 4-Pyridinecarboxylic acid (CA INDEX NAME)



RN 59-67-6 HCAPLUS
CN 3-Pyridinecarboxylic acid (CA INDEX NAME)



RN 108-77-0 HCAPLUS
CN 1,3,5-Triazine, 2,4,6-trichloro- (CA INDEX NAME)



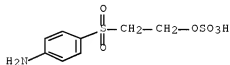
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CN 1,4-Diazabicyclo[2.2.2]octane (CA INDEX NAME)



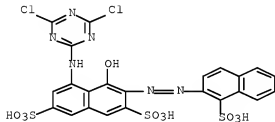
RN 1118-68-9 HCAPLUS
CN Glycine, N,N-dimethyl- (CA INDEX NAME)



RN 2494-89-5 HCAPLUS
 CN Ethanol, 2-[(4-aminophenyl)sulfonyl]-, 1-(hydrogen sulfate) (CA INDEX NAME)

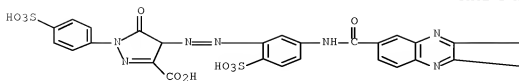


RN 57583-69-4 HCAPLUS
 CN 2,7-Naphthalenedisulfonic acid, 5-[(4,6-dichloro-1,3,5-triazin-2-yl)amino]-4-hydroxy-3-[2-(1-sulfo-2-naphthalenyl)diazenyl]-, sodium salt (1:3) (CA INDEX NAME)

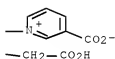


● 3 Na

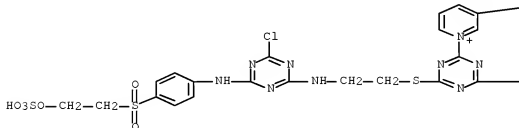
RN 246255-73-2 HCAPLUS
 CN Pyridinium, 3-carboxy-1-[7-[[[3-[2-[3-carboxy-4,5-dihydro-5-oxo-1-(4-sulphophenyl)-1H-pyrazol-4-yl]diazenyl]-4-sulphophenyl]amino]carbonyl]-3-(carboxymethyl)-2-quinoxaliny]-, inner salt, sodium salt (1:3) (CA INDEX NAME)



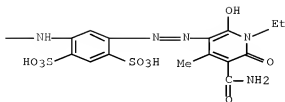
●3 Na



RN 246255-74-3 HCAPLUS
 CN Pyridinium, 1-[4-[[5-[2-[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]diazenyl]-2,4-disulfophenyl]amino]-6-[[2-[[4-chloro-6-[[4-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]ethyl]thio]-1,3,5-triazin-2-yl]-3-carboxy-, inner salt, sodium salt (1:2) (CA INDEX NAME)

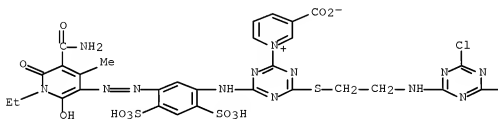


●2 Na

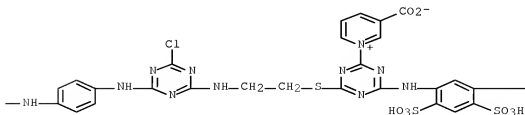
—CO₂⁻

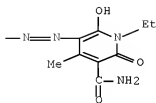
RN 246255-76-5 HCAPLUS

CN Pyridinium, 1,1'-[1,4-phenylenebis[imino(6-chloro-1,3,5-triazine-4,2-diyl)imino-2,1-ethanedithio[6-[[5-[[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]azo]-2,4-disulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]bis[3-carboxy-, bis(inner salt), tetrasodium salt (9CI) (CA INDEX NAME)



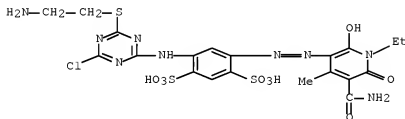
● 4 Na





RN 246255-78-7 HCAPLUS

CN 1,3-Benzenedisulfonic acid, 4-[2-[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]diazenyl]-6-[[4-[(2-aminoethyl)thio]-6-chloro-1,3,5-triazin-2-yl]amino]-, sodium salt (1:2) (CA INDEX NAME)



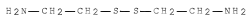
● 2 Na

IT 51-85-4, Cystamine 59-67-6, Nicotinic acid, reactions
106-50-3, 1,4-Benzenediamine, reactions 108-77-0,
Cyanuric chloride 2494-89-5, 4-(2-Sulfatoethylsulfonyl)aniline
70865-29-1, Procion Yellow MX 8G 204995-91-5, Levafix
Golden Yellow E-G

RL: RCT (Reactant); RACT (Reactant or reagent)
(starting material; production of nitrogen heterocycle reactive
dyes containing thio and quaternary ammonium groups)

RN 51-85-4 HCAPLUS

CN Ethanamine, 2,2'-dithiobis- (CA INDEX NAME)

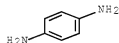


RN 59-67-6 HCAPLUS

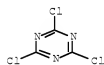
CN 3-Pyridinecarboxylic acid (CA INDEX NAME)



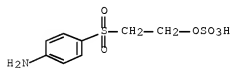
RN 106-50-3 HCAPLUS
 CN 1,4-Benzenediamine (CA INDEX NAME)



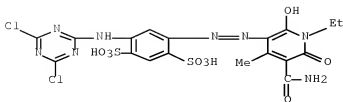
RN 108-77-0 HCAPLUS
 CN 1,3,5-Triazine, 2,4,6-trichloro- (CA INDEX NAME)



RN 2494-89-5 HCAPLUS
 CN Ethanol, 2-[(4-aminophenyl)sulfonyl]-, 1-(hydrogen sulfate) (CA INDEX NAME)



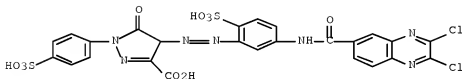
RN 70865-29-1 HCAPLUS
 CN 1,3-Benzenedisulfonic acid, 4-[2-[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]diazonyl]-6-[(4,6-dichloro-1,3,5-triazin-2-yl)amino]-, sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 204995-91-5 HCAPLUS

CN 1H-Pyrazole-3-carboxylic acid, 4-[2-[5-[(2,3-dichloro-6-quinoxaliny)carbonyl]amino]-2-sulphophenyl]diazenyl]-4,5-dihydro-5-oxo-1-(4-sulphophenyl)-, sodium salt (1:3) (CA INDEX NAME)



●3 Na

IC ICM C09B062-02

ICS C09B062-503

CC 41-3 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)

Section cross-reference(s): 40, 45, 62

ST reactive dye nitrogen heterocycle deriv prodn;
quaternary ammonium reactive dye deriv prodn; thio
deriv reactive dye prodn; cotton dye nitrogen
heterocyclic compd

IT Textiles

(cotton; reactive dyeing with prepared nitrogen
heterocycle reactive dyes containing thio and
quaternary ammonium groups)

IT Reactive azo dyes

Reactive dyes

(production of nitrogen heterocycle reactive dyes
containing thio and quaternary ammonium groups)

IT Leather

(reactive dyeing with prepared nitrogen heterocycle
reactive dyes containing thio and quaternary ammonium
groups)

IT Keratins

Polyamide fibers, processes

RL: PEP (Physical, engineering or chemical process); PROC (Process)

(reactive dyeing with prepared nitrogen heterocycle
reactive dyes containing thio and quaternary ammonium
groups)

- IT Textiles
(silk; reactive dyeing with prepared nitrogen heterocycle reactive dyes containing thio and quaternary ammonium groups)
- IT Reactive dyeing
(with prepared nitrogen heterocycle reactive dyes containing thio and quaternary ammonium groups)
- IT Textiles
(wool; reactive dyeing with prepared nitrogen heterocycle reactive dyes containing thio and quaternary ammonium groups)
- IT 77-92-9, uses 110-16-7, 2-Butenedioic acid (2Z)-, uses 110-17-8, 2-Butenedioic acid (2E)-, uses 6915-15-7, Malic acid
RL: NUU (Other use, unclassified); USES (Uses)
(buffers for dyeing with prepared nitrogen heterocycle reactive dyes containing thio and quaternary ammonium groups)
- IT 55-22-1DP, Isonicotinic acid, reaction products with halogen-containing dyes and thiols 59-67-6DP, Nicotinic acid, reaction products with halogen-containing dyes and thiols 60-24-2DP, Mercaptoethanol, reaction products with halogen-containing dyes and amines 68-11-1DP, Mercaptoacetic acid, reaction products with halogen-containing dyes and amines 70-49-5DP, Mercaptosuccinic acid, reaction products with halogen-containing dyes and amines 108-77-0DP, Cyanuric chloride, reaction products with sulfatoethylsulfonylaniline, halogen-containing dyes, thiols and amines 123-81-9DP, Ethylene glycol bis(thioglycolate), reaction products with halogen-containing dyes and amines 280-57-9DP, DABCO, reaction products with halogen-containing dyes and thiols 1118-68-9DP, Dimethylaminoacetic acid, reaction products with halogen-containing dyes and thiols 2494-89-5DP, 4-(2-Sulfatoethylsulfonfyl)aniline, reaction products with cyanuric chloride, halogen-containing dyes, thiols and amines 57583-69-4DP, Procion Red MX 8B, reaction products with thiols and amines 71902-16-4DP, Drimarene Brilliant Red K 4BL, reaction products with thiols and amines 246220-94-0DP, Drimalan Red F-B, reaction products with thiols and amines 246255-73-2P 246255-74-3P 246255-76-5P 246255-78-7DP, reaction products with halogen-containing dyes and amines
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(dye; production of nitrogen heterocycle reactive dyes containing thio and quaternary ammonium groups)
- IT 51-85-4, Cystamine 59-67-6, Nicotinic acid, reactions 68-11-1, Thioglycolic acid, reactions 106-50-3, 1,4-Benzenediamine, reactions 108-77-0, Cyanuric chloride 2494-89-5, 4-(2-Sulfatoethylsulfonfyl)aniline 70865-29-1, Procion Yellow MX 8G 204995-91-5, Levafix Golden Yellow E-G
RL: RCT (Reactant); RACT (Reactant or reagent)
(starting material; production of nitrogen heterocycle reactive dyes containing thio and quaternary ammonium groups)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 13 OF 24 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1999:194151 HCAPLUS Full-text

DOCUMENT NUMBER: 130:253669

TITLE: Novel triphenodioxazine dyes, their precursors, their preparation and their use

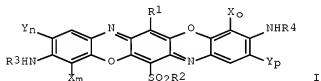
INVENTOR(S): Kunde, Klaus

PATENT ASSIGNEE(S): Bayer A.-G., Germany

SOURCE: PCT Int. Appl., 32 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9912937	A2	19990318	WO 1998-EP5528	19980901 <--
WO 9912937	A3	19990610		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG DE 19739983 A1 19990318 DE 1997-19739983 19970911 <-- AU 9894390 A 19990329 AU 1998-94390 19980901 <-- PRIORITY APPLN. INFO.: DE 1997-19739983 A 19970911 <-- WO 1998-EP5528 W 19980901 <--				

OTHER SOURCE(S): MARPAT 130:253669
 GI

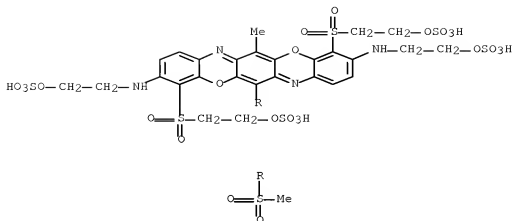


AB The triphenyldioxazines (I; R1 = optionally substituted C1-4-alkyl or Ph; R2 = C1-4-alkyl, optionally substituted Ph; R3, R4 = H, Me, carboxy- or sulfomethyl, optionally substituted C2-4-alkyl; X0, Xm, Yn, Yp = SO3H, CO2H, hydroxyethylsulfonyl, sulfatoethylsulfonyl; m, n, o, p = 0, 1; m + n = 1; o + p = 1) are obtained from dihydroxydiiminocyclohexadiene precursors which may be in turn obtained from hydroquinones or quinones and p-phenylenediamines or their precursors. These novel triphenyldioxazines are used for dyeing and imprinting of cellulosic materials, natural and synthetic polyamides, and leather. In examples, I (R1 = R2 = Me; R3 = R4 = 2-aminoethyl; X = SO3H; m = o = 1; n = p = 0), I (R1 = R2 = Me; R3 = R4 = H; X = SO3H; m = o = 1; n = p = 0), and I (R1 = R2 = Me; R3 = R4 = 2-sulfatoethyl; X = 2-sulfatoethylsulfonyl; m = o = 1; n = p = 0) were obtained.

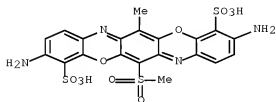
IT 221345-44-4P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (blue dye; preparation of triphenyldioxazine dyes for textiles and leather)

RN 221345-44-4 HCAPLUS

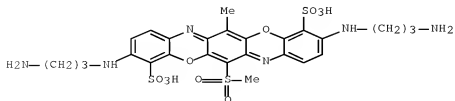
CN Ethanol, 2,2'-[16-methyl-13-(methylsulfonyl)-3,10-bis[[2-(sulfooxy)ethylamino]-4,11-triphenyldioxazinediyl]bis(sulfonyl)]bis-, bis(hydrogen sulfate) (ester) (9CI) (CA INDEX NAME)



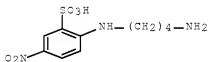
IT 221345-42-2P 221345-43-3P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (dye; preparation of triphenodioxazine dyes for textiles and leather)
 RN 221345-42-2 HCAPLUS
 CN 4,11-Triphenodioxazinedisulfonic acid,
 3,10-diamino-6-methyl-13-(methanesulfonyl)- (CA INDEX NAME)



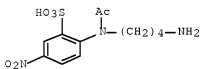
RN 221345-43-3 HCAPLUS
 CN 4,11-Triphenodioxazinedisulfonic acid,
 3,10-bis[(3-aminopropyl)amino]-6-methyl-13-(methanesulfonyl)- (CA INDEX NAME)



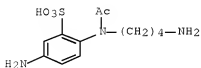
IT 221345-11-5P, 2-(4-Aminobutylamino)-5-nitrobenzenesulfonic acid
 221345-13-7P, 2-[N-Acetyl-N-(4-Aminobutyl)amino]-5-nitrobenzenesulfonic acid 221345-15-9P,
 2-[N-Acetyl-N-(4-Aminobutyl)amino]-5-aminobenzenesulfonic acid
 221345-17-1P, 2-[N-Acetyl-N-(2-Aminoethyl)amino]-5-nitrobenzenesulfonic acid 221345-19-3P,
 2-[N-Acetyl-N-(3-Aminopropyl)amino]-5-nitrobenzenesulfonic acid
 221345-21-7P, 2-[N-Acetyl-N-(2-Aminoethyl)amino]-5-aminobenzenesulfonic acid 221345-23-9P,
 2-[N-Acetyl-N-(3-Aminopropyl)amino]-5-aminobenzenesulfonic acid
 221345-27-3P 221345-30-8P 221345-32-0P
 221345-35-3P 221345-37-5P 221345-39-7P
 221345-40-0P 221345-41-1P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (intermediate; preparation of triphenodioxazine dyes for textiles and leather)
 RN 221345-11-5 HCAPLUS
 CN Benzenesulfonic acid, 2-[(4-aminobutyl)amino]-5-nitro- (CA INDEX NAME)



RN 221345-13-7 HCAPLUS
 CN Benzenesulfonic acid, 2-[acetyl(4-aminobutyl)amino]-5-nitro- (CA INDEX NAME)

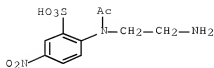


RN 221345-15-9 HCAPLUS
 CN Benzenesulfonic acid, 2-[acetyl(2-aminoethyl)amino]-5-amino- (CA INDEX NAME)



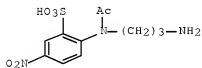
RN 221345-17-1 HCAPLUS
 CN Benzenesulfonic acid, 2-[acetyl(2-aminoethyl)amino]-5-nitro- (CA INDEX NAME)

NAME)



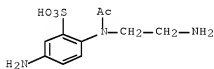
RN 221345-19-3 HCAPLUS

CN Benzenesulfonic acid, 2-[acetyl(3-aminopropyl)amino]-5-nitro- (CA INDEX NAME)



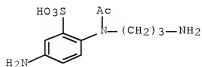
RN 221345-21-7 HCAPLUS

CN Benzenesulfonic acid, 2-[acetyl(2-aminoethyl)amino]-5-amino- (CA INDEX NAME)



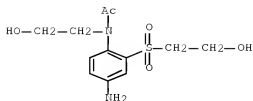
RN 221345-23-9 HCAPLUS

CN Benzenesulfonic acid, 2-[acetyl(3-aminopropyl)amino]-5-amino- (CA INDEX NAME)



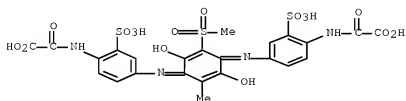
RN 221345-27-3 HCAPLUS

CN Acetamide, N-[4-amino-2-[(2-hydroxyethyl)sulfonyl]phenyl]-N-(2-hydroxyethyl)- (CA INDEX NAME)



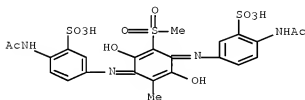
RN 221345-30-8 HCAPLUS

CN Acetic acid, 2,2'-[[2,5-dihydroxy-3-methyl-6-(methylsulfonyl)-2,5-cyclohexadiene-1,4-diylidene]bis[nitrilo(2-sulfo-4,1-phenylene)imino]]bis[2-oxo- (9CI) (CA INDEX NAME)



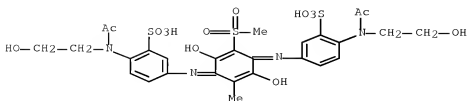
RN 221345-32-0 HCAPLUS

CN Benzenesulfonic acid, 3,3'-[[2,5-dihydroxy-3-methyl-6-(methylsulfonyl)-2,5-cyclohexadiene-1,4-diylidene]dinitrilo]bis[6-(acetyl amino)- (9CI) (CA INDEX NAME)



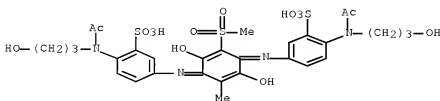
RN 221345-35-3 HCAPLUS

CN Benzenesulfonic acid, 3,3'-[[2,5-dihydroxy-3-methyl-6-(methylsulfonyl)-2,5-cyclohexadiene-1,4-diylidene]dinitrilo]bis[6-[acetyl(2-hydroxyethyl)amino]- (9CI) (CA INDEX NAME)



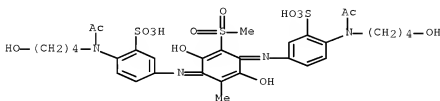
RN 221345-37-5 HCAPLUS

CN Benzenesulfonic acid, 3,3'-[2,5-dihydroxy-3-methyl-6-(methylsulfonyl)-2,5-cyclohexadiene-1,4-diylidene]dinitrilo]bis[6-[acetyl(3-hydroxypropyl)amino]- (9CI) (CA INDEX NAME)



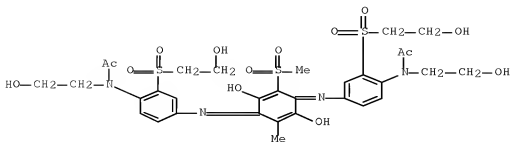
RN 221345-39-7 HCAPLUS

CN Benzenesulfonic acid, 3,3'-[2,5-dihydroxy-3-methyl-6-(methylsulfonyl)-2,5-cyclohexadiene-1,4-diylidene]dinitrilo]bis[6-[acetyl(4-hydroxybutyl)amino]- (9CI) (CA INDEX NAME)



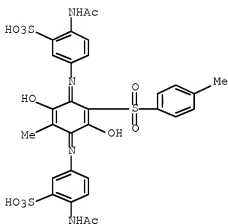
RN 221345-40-0 HCAPLUS

CN Acetamide, N-[4-[[4-[[4-[acetyl(2-hydroxyethyl)amino]-3-[(2-hydroxyethyl)sulfonyl]phenyl]imino]-2,5-dihydroxy-3-methyl-6-(methylsulfonyl)-2,5-cyclohexadien-1-ylidene]amino]-2-[(2-hydroxyethyl)sulfonyl]phenyl]-N-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



RN 221345-41-1 HCAPLUS

CN Benzenesulfonic acid, 3,3'-[2,5-dihydroxy-3-methyl-6-[(4-methylphenyl)sulfonyl]-2,5-cyclohexadiene-1,4-diylidene]dinitrilo]bis[6-(acetylamino)- (9CI) (CA INDEX NAME)



IT 107-15-3, Ethylenediamine, reactions 109-76-2,
1,3-Diaminopropane 110-60-1, 1,4-Diaminobutane 946-30-5
, Sodium 2-chloro-5-nitrobenzenesulfonate 6364-15-4
6973-05-3, 2-Acetamido-5-aminobenzenesulfonic acid
221345-25-1

RL: RCT (Reactant); RACT (Reactant or reagent)
(starting material; preparation of triphenyldioxazine dyes for textiles and
leather)

RN 107-15-3 HCAPLUS

CN 1,2-Ethanediamine (CA INDEX NAME)

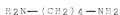


RN 109-76-2 HCAPLUS

CN 1,3-Propanediamine (CA INDEX NAME)



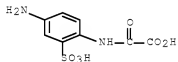
RN 110-60-1 HCAPLUS
CN 1,4-Butanediamine (CA INDEX NAME)



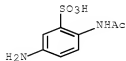
RN 946-30-5 HCAPLUS
CN Benzenesulfonic acid, 2-chloro-5-nitro-, sodium salt (1:1) (CA INDEX NAME)



RN 6364-15-4 HCAPLUS
CN Acetic acid, 2-[(4-amino-2-sulphophenyl)amino]-2-oxo- (CA INDEX NAME)

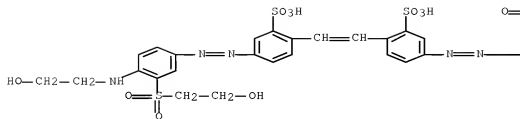


RN 6973-05-3 HCAPLUS
CN Benzenesulfonic acid, 2-(acetylamino)-5-amino- (CA INDEX NAME)

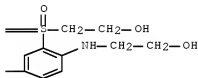


RN 221345-25-1 HCAPLUS
CN Benzenesulfonic acid, 2,2'-(1,2-ethenediyl)bis[5-[4-[(2-hydroxyethyl)amino]-3-[(2-hydroxyethyl)sulfonyl]phenyl]azo]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



- IC ICM C07D498-00
- CC 41-5 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)
Section cross-reference(s): 40, 45
- ST triphenyldiazine dye prepn textile leather application
- IT Reactive dyeing
(of cotton textiles with prepared triphenyldiazine dyes)
- IT Dyeing
(of leather and textiles with prepared triphenyldiazine dyes)
- IT leather
(preparation of triphenyldiazine dyes for)
- IT Dyes
(preparation of triphenyldiazine dyes for textiles and leather)
- IT Reactive dyes
(vinyl sulfone; preparation of triphenyldiazine dyes for textiles and leather)
- IT 221345-44-4P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(blue dye; preparation of triphenyldiazine dyes for textiles and leather)
- IT 221345-42-2P 221345-43-3P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(dye; preparation of triphenyldiazine dyes for textiles and leather)
- IT 221345-07-9P, 2-Methyl-5-(methylsulfonyl)hydroquinone 221345-09-1P,
2-Methyl-5-(4-methylphenylsulfonyl)hydroquinone 221345-11-5P,
2-(4-Aminobutylamino)-5-nitrobenzenesulfonic acid 221345-13-7P,
2-[N-Acetyl-N-(4-Aminobutyl)amino]-5-nitrobenzenesulfonic acid
221345-15-9P, 2-[N-Acetyl-N-(4-Aminobutyl)amino]-5-aminobenzenesulfonic acid 221345-17-1P,

2-[N-Acetyl-N-(2-Aminoethyl)amino]-5-nitrobenzenesulfonic acid
 221345-19-3P, 2-[N-Acetyl-N-(3-Aminopropyl)amino]-5-
 nitrobenzenesulfonic acid 221345-21-7P,
 2-[N-Acetyl-N-(2-Aminoethyl)amino]-5-aminobenzenesulfonic acid
 221345-23-9P, 2-[N-Acetyl-N-(3-Aminopropyl)amino]-5-
 aminobenzenesulfonic acid 221345-27-3P 221345-30-8P
 221345-32-0P 221345-35-3P 221345-37-5P
 221345-39-7P 221345-40-0P 221345-41-1P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
 (Reactant or reagent)
 (intermediate; preparation of triphenodioxazine dyes for textiles and
 leather)

IT 64-19-7, Acetic acid, reactions 95-71-6, Methylhydroquinone
 107-15-3, Ethylenediamine, reactions 109-76-2,
 1,3-Diaminopropane 110-60-1, 1,4-Diaminobutane 824-79-3,
 Sodium p-toluenesulfinate 946-30-5, Sodium
 2-chloro-5-nitrobenzenesulfonate 6364-15-4 6973-05-3,
 2-Acetamido-5-aminobenzenesulfonic acid 20277-69-4, Sodium
 methylsulfinate 221345-25-1
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (starting material; preparation of triphenodioxazine dyes for textiles and
 leather)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 14 OF 24 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1998:175784 HCAPLUS Full-text
 DOCUMENT NUMBER: 128:193734
 ORIGINAL REFERENCE NO.: 128:38265a,38268a
 TITLE: Mixtures of dyes and their use
 INVENTOR(S): Adam, Jean-Marie; Hurter, Rudolf
 PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.
 SOURCE: Eur. Pat. Appl., 30 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 826743	A2	19980304	EP 1997-810580	19970819 <--
EP 826743	A3	19981209		
EP 826743	B1	20020918		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 10088021	A	19980407	JP 1997-221395	19970818 <--
JP 4056593	B2	20080305		

PRIORITY APPLN. INFO.: CH 1996-2087 A 19960826 <--
 OTHER SOURCE(S): MARPAT 128:193734

AB Dye mixts. for printing and dyeing of fibrous materials contain at least one
 dye having triazinediamino groups and at least one of another dye having
 either triazinediamino groups or amide linkages. Level dyeings on polyamide
 with good fastness are obtained with these reactive dye mixts. In a typical
 dye preparation, 1,3-phenylenediamine-4-sulfonic acid was condensed (1:1) with
 cyanuric chloride and the product was diazotized and coupled with 2-
 naphthylamine-5-sulfonic acid; condensation of the resulting azo dye with
 PhNHET gave a reactive chlorotriazine dye. Dyeing of polyamide, wool, and
 leather is exemplified.

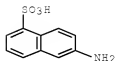
IT 81-05-0, 2-Naphthylamine-5-sulfonic acid

11/628659

RL: RCT (Reactant); RACT (Reactant or reagent)
(coupling component; preparation of reactive dyes for
dyeing mixts. for polyamide)

RN 81-05-0 HCAPLUS

CN 1-Naphthalenesulfonic acid, 6-amino- (CA INDEX NAME)



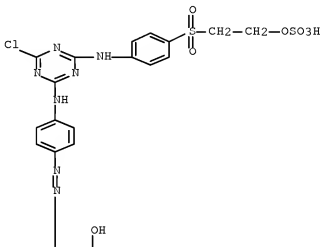
IT 168544-29-4P 178493-40-8P 195306-72-0P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material
use); PREP (Preparation); USES (Uses)
(dye; preparation of reactive dyes for
dyeing mixts. for polyamide)

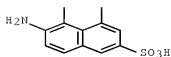
RN 168544-29-4 HCAPLUS

CN 2-Naphthalenesulfonic acid, 6-amino-5-[2-[4-[[4-chloro-6-[[4-[[2-(
(sulfooxy)ethyl)sulfonyl]phenyl]amino]-1,3,5-triazin-2-
yl]amino]phenyl]diazonyl]-4-hydroxy- (CA INDEX NAME)

PAGE 1-A

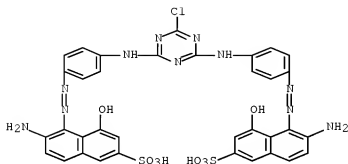


PAGE 2-A



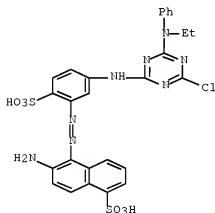
RN 178493-40-8 HCAPLUS

CN 2-Naphthalenesulfonic acid, 5,5'-[(6-chloro-1,3,5-triazine-2,4-diyl)bis(imino-4,1-phenyleneazo)]bis[6-amino-4-hydroxy- (9CI) (CA INDEX NAME)



RN 195306-72-0 HCAPLUS

CN 1-Naphthalenesulfonic acid, 6-amino-5-[2-[5-[[4-chloro-6-(ethylphenylamino)-1,3,5-triazin-2-yl]amino]-2-sulphophenyl]diazenyl]- (CA INDEX NAME)

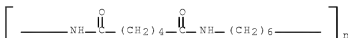


IT 32131-17-2, Nylon 66, processes

RL: PEP (Physical, engineering or chemical process); PROC (Process) (fabrics; dyeing and printing with prepared reactive dye mixts.)

RN 32131-17-2 HCAPLUS

CN Poly[imino(1,6-dioxo-1,6-hexanediyl)imino-1,6-hexanediyl] (CA INDEX NAME)



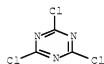
IT 88-63-1, 1,3-Phenylenediamine-4-sulfonic acid 103-69-5,
 N-Ethylaniline 108-77-0, Cyanuric chloride 2494-89-5,
 4-(β -Sulfatoethylsulfonyl)aniline 59836-94-1,
 6-Amino-5-(4-aminophenylazo)-4-hydroxy-2-naphthalenesulfonic acid
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (starting material; preparation of reactive dyes for
 dyeing mixts. for polyamide)
 RN 88-63-1 HCAPLUS
 CN Benzenesulfonic acid, 2,4-diamino- (CA INDEX NAME)



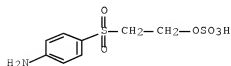
RN 103-69-5 HCAPLUS
 CN Benzenamine, N-ethyl- (CA INDEX NAME)



RN 108-77-0 HCAPLUS
 CN 1,3,5-Triazine, 2,4,6-trichloro- (CA INDEX NAME)

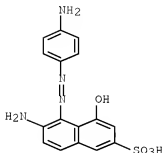


RN 2494-89-5 HCAPLUS
 CN Ethanol, 2-[(4-aminophenyl)sulfonyl]-, 1-(hydrogen sulfate) (CA INDEX NAME)



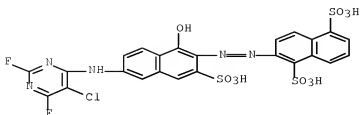
RN 59836-94-1 HCAPLUS

CN 2-Naphthalenesulfonic acid, 6-amino-5-[2-(4-aminophenyl)diazenyl]-4-hydroxy- (CA INDEX NAME)



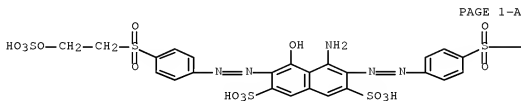
- IC ICM C09B067-22
ICS D06P003-10; C09B062-04
- CC 41-3 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)
Section cross-reference(s): 40, 45
- ST reactive dye mixt polyamide dyeing printing;
azo reactive dye prepn
- IT Leather
(dyeing and printing with prepared reactive dye mixts.)
- IT Polyamides, processes
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(fabrics; dyeing and printing with prepared reactive dye mixts.)
- IT Polyamide fibers, uses
RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(fabrics; dyeing and printing with prepared reactive dye mixts.)
- IT Reactive dyeing
(of polyamide, wool and leather with prepared reactive dye mixts.)
- IT Reactive azo dyes
Reactive dyes
(preparation of reactive dyes for dyeing mixts. for polyamide)
- IT Textile printing
(reactive; of polyamide, wool and leather with prepared reactive dye mixts.)
- IT Textiles
(wool; dyeing and printing with prepared reactive dye mixts.)
- IT 81-05-0, 2-Naphthylamine-5-sulfonic acid
RL: RCT (Reactant); RACT (Reactant or reagent)
(coupling component; preparation of reactive dyes for dyeing mixts. for polyamide)
- IT 168544-29-4P 178493-40-8P 195306-72-0P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(dye; preparation of reactive dyes for dyeing mixts. for polyamide)

- IT 32131-17-2, Nylon 66, processes
 RL: PEP (Physical, engineering or chemical process); PROC (Process)
 (fabrics; dyeing and printing with prepared reactive
 dye mixts.)
- IT 88-63-1, 1,3-Phenylenediamine-4-sulfonic acid 103-69-5,
 N-Ethylaniline 108-77-0, Cyanuric chloride 2494-89-5,
 4-(β -Sulfatoethylsulfonyl)aniline 59836-94-1,
 6-Amino-5-(4-aminophenylazo)-4-hydroxy-2-naphthalenesulfonic acid
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (starting material; preparation of reactive dyes for
 dyeing mixts. for polyamide)
- L31 ANSWER 15 OF 24 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1996:339272 HCAPLUS Full-text
 DOCUMENT NUMBER: 125:36240
 ORIGINAL REFERENCE NO.: 125:7029h,7029a
 TITLE: The use of chitosan in the dyeing of full
 chrome leather with reactive
 dyes
- AUTHOR(S): Burkinshaw, S. M.; Jarvis, A. N.
 CORPORATE SOURCE: Specialty Chem. Group, The University, Leeds, LS2 9JT,
 UK
 SOURCE: Dyes and Pigments (1996), 31(1), 35-52
 CODEN: DYPIDX; ISSN: 0143-7208
- PUBLISHER: Elsevier
 DOCUMENT TYPE: Journal
 LANGUAGE: English
- AB Treatment of chrome grain leather with two grades of chitosan enhanced the
 depth of shade obtained using three difluorochloropyrimidine and three β -
 sulphatoethylsulfone reactive dyes. The pretreated leather was of deeper or
 similar hue to that of dyed untreated leather and the wash fastness of the
 pretreated dyed leather was comparable. The greater color strength of the
 dyed, pretreated leather was attributed to increased dye- leather
 substantivity arising from the presence of the cationic polymer at the surface
 of the leather. Application of an unreactive, hydrolyzed version of one of
 the dyes to the chitosan-treated leather revealed that the pretreatment also
 imparted addnl. nucleophilic groups that were available for covalent
 attachment of the reactive dyes.
- IT 72828-73-0, C.I. Reactive Orange 64
 RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC
 (Process); RACT (Reactant or reagent)
 (Drimarene Brilliant Orange K 3R; in dyeing of
 chitosan-pretreated leather)
- RN 72828-73-0 HCAPLUS
- CN 1,5-Naphthalenedisulfonic acid, 2-[2-[6-[(5-chloro-2,6-difluoro-4-
 pyrimidinyl)amino]-1-hydroxy-3-sulfo-2-naphthalenyl]diazany]-, sodium
 salt (1:3) (CA INDEX NAME)



●3 Na

IT 17095-24-8, C.I. Reactive Black 5
 RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)
 (Remazol Black B; in dyeing of chitosan-pretreated leather)
 RN 17095-24-8 HCAPLUS
 CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3,6-bis[2-[4-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]diazanyl]-, sodium salt (1:4) (CA INDEX NAME)



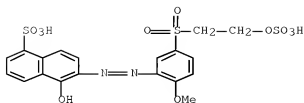
●4 Na

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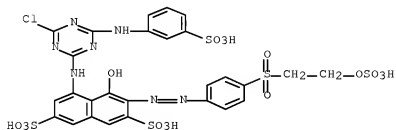
—CH₂—CH₂—OSO₃H

IT 19526-81-9
 RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)
 (Remazol Red RB; in dyeing of chitosan-pretreated leather)
 RN 19526-81-9 HCAPLUS
 CN 1-Naphthalenesulfonic acid, 5-hydroxy-6-[2-[2-methoxy-5-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]diazanyl]-, sodium salt (1:2) (CA INDEX NAME)



●2 Na

- IT 145017-98-7, C.I. Reactive Red 198
 RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)
 (in dyeing of chitosan-pretreated leather)
- RN 145017-98-7 HCAPLUS
- CN 2,7-Naphthalenedisulfonic acid, 5-[[4-chloro-6-[(3-sulphophenyl)amino]-1,3,5-triazin-2-yl]amino]-4-hydroxy-3-[2-[4-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]diazonyl]-, sodium salt (1:4) (CA INDEX NAME)



●4 Na

- CC 45-2 (Industrial Organic Chemicals, Leather, Fats, and Waxes)
 Section cross-reference(s): 44
- ST dyeing chitosan pretreated leather
- IT leather
 (dyeing of chitosan-pretreated leather with reactive dyes)
- IT Dyeing
 (of chitosan-pretreated leather with reactive dyes)
- IT 61969-09-3, C.I. Reactive Green 21
 RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)
 (Drimarene Brilliant Green K 5BL; in dyeing of chitosan-pretreated leather)
- IT 72328-73-0, C.I. Reactive Orange 64
 RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)
 (Drimarene Brilliant Orange K 3R; in dyeing of chitosan-pretreated leather)

IT 71902-16-4, C.I. Reactive Red 147
 RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)
 (Dimarene Brilliant Red 4BL-CDG; in dyeing of chitosan-pretreated leather)

IT 17695-24-8, C.I. Reactive Black 5
 RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)
 (Remazol Black B; in dyeing of chitosan-pretreated leather)

IT 19526-81-9
 RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)
 (Remazol Red RB; in dyeing of chitosan-pretreated leather)

IT 9012-76-4, Chitosan
 RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)
 (dyeing of chitosan-pretreated leather with reactive dyes)

IT 145017-98-7, C.I. Reactive Red 198 177772-87-1, Remazol Brilliant Blue FB
 RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)
 (in dyeing of chitosan-pretreated leather)

L31 ANSWER 16 OF 24 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1996:294756 HCAPLUS Full-text

DOCUMENT NUMBER: 124:319677

ORIGINAL REFERENCE NO.: 124:59241a,59244a

TITLE: Bifunctionally reactive monoazo dyes
 , their preparation and use

INVENTOR(S): Lehr, Friedrich

PATENT ASSIGNEE(S): Sandoz Ltd., Switz.; Sandoz-Patent-GmbH;
 Sandoz-Erfindungen Verwaltungsgesellschaft MbH

SOURCE: PCT Int. Appl., 31 pp.

CODEN: PIXXD2

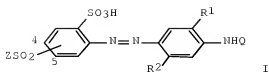
DOCUMENT TYPE: Patent

LANGUAGE: English

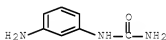
FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

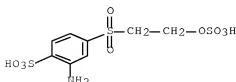
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9602593	A1	19960201	WO 1995-EP2779	19950714 <--
W: BR, CN, JP, KR, MX, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
DE 4425222	A1	19960118	DE 1994-4425222	19940716 <--
DE 4435380	A1	19960411	DE 1994-4435380	19941004 <--
EP 772652	A1	19970514	EP 1995-926893	19950714 <--
EP 772652	B1	20010829		
R: CH, DE, ES, FR, GB, IT, LI, PT				
BR 9508283	A	19971223	BR 1995-8283	19950714 <--
JP 10504330	T	19980428	JP 1996-504698	19950714 <--
JP 3829992	B2	20061004		
US 5747657	A	19980505	US 1997-765786	19970114 <--
PRIORITY APPLN. INFO.:			DE 1994-4425222	A 19940716 <--
			DE 1994-4435380	A 19941004 <--
			WO 1995-EP2779	W 19950714 <--
OTHER SOURCE(S):		CASREACT 124:319677; MARPAT 124:319677		
GI				



- AB The dyes have the formula I, where R1 signifies H, Me, OMe, or OEt, R2 signifies H, Me, NHCONH2 or NHAc, Q signifies 2,6-dichloro-5-cyano-4-pyrimidinyl, (5-chloro-2,6-difluoro-4-pyrimidinyl, or 4-fluoro-6-morpholino-s-triazin-2-yl, Z signifies CH:CH2 or a precursor and the SO2Z group may be bonded in position 4 or 5. The I are useful in printing or dyeing HO- or N-containing organic substrates, especially cotton and leather. Thus, 3-HO3SOCH2CH2SO2C6H4NH2 was sulfonated, diazotized, and coupled with 3-H2NCONHC6H4NH2, and the product was condensed with 5-chloro-2,4,6-trifluoropyrimidine to give I (R1 = H, R2 = NHCONH2, Q = 5-chloro-2,6-difluoro-4-pyrimidinyl, Z = CH2CH2OSO3H, SO2Z in position 5), λ_{\max} 378 nm in H2O, fast golden yellow on cotton.
- IT 25711-72-2, (m-Aminophenyl)urea
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (coupling component; preparation of bifunctionally reactive monoazo dyes for cotton and leather)
- RN 25711-72-2 HCAPLUS
- CN Urea, N-(3-aminophenyl)- (CA INDEX NAME)

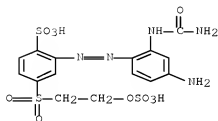


- IT 41261-80-7P, 2-Amino-4-(β -sulphatoethylsulfonyl)benzenesulfonic acid 174491-68-0P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (intermediate; preparation of bifunctionally reactive monoazo dyes for cotton and leather)
- RN 41261-80-7 HCAPLUS
- CN Benzenesulfonic acid, 2-amino-4-[[2-(sulfooxy)ethylsulfonyl]- (CA INDEX NAME)



RN 174491-68-0 HCAPLUS

CN Benzenesulfonic acid, 2-[2-[4-amino-2-
[(aminocarbonyl)amino]phenyl]diazanyl]-4-[[2-(sulfooxy)ethyl]sulfonyl]-
(CA INDEX NAME)



IT 176449-19-7P 176449-20-0P 176449-21-1P

176449-22-2P 176449-23-3P 176449-24-4P

176449-25-5P 176449-26-6P 176449-27-7P

176449-28-8P 176449-29-9P 176449-30-2P

176449-31-3P 176449-32-4P 176449-34-6P

176449-35-7P 176449-36-8P 176449-37-9P

176449-38-0P 176449-40-4P 176449-41-5P

176449-42-6P 176449-43-7P 176449-44-8P

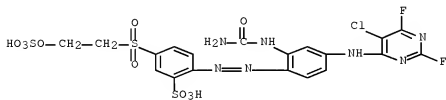
176449-45-9P 176449-46-0P 176449-47-1P

176449-48-2P 177347-90-9P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material
use); PREP (Preparation); USES (Uses)
(preparation of bifunctionally reactive monoazo dyes for
cotton and leather)

RN 176449-19-7 HCAPLUS

CN Benzenesulfonic acid, 2-[2-[2-[(aminocarbonyl)amino]-4-[(5-chloro-2,6-
difluoro-4-pyrimidinyl)amino]phenyl]diazanyl]-5-[[2-
(sulfooxy)ethyl]sulfonyl]-, sodium salt (1:2) (CA INDEX NAME)

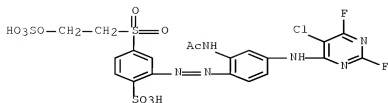


● 2 Na

RN 176449-20-0 HCAPLUS

CN Benzenesulfonic acid, 2-[2-[2-(acetyl amino)-4-[(5-chloro-2,6-difluoro-4-
pyrimidinyl)amino]phenyl]diazanyl]-4-[[2-(sulfooxy)ethyl]sulfonyl]-,
sodium salt (1:2) (CA INDEX NAME)

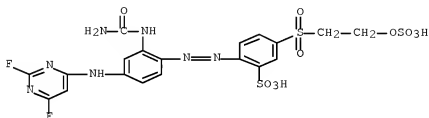
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● 2 Na

RN 176449-21-1 HCAPLUS

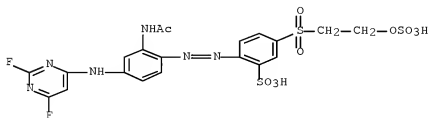
CN Benzenesulfonic acid, 2-[2-[2-[(aminocarbonyl)amino]-4-[(2,6-difluoro-4-pyrimidinyl)amino]phenyl]diazenyl]-5-[[2-(sulfooxy)ethyl]sulfonyl]-, sodium salt (1:2) (CA INDEX NAME)



● 2 Na

RN 176449-22-2 HCAPLUS

CN Benzenesulfonic acid, 2-[2-[2-(acetylamino)-4-[(2,6-difluoro-4-pyrimidinyl)amino]phenyl]diazenyl]-5-[[2-(sulfooxy)ethyl]sulfonyl]-, sodium salt (1:2) (CA INDEX NAME)



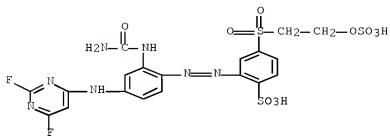
● 2 Na

RN 176449-23-3 HCAPLUS

CN Benzenesulfonic acid, 2-[2-[2-[(aminocarbonyl)amino]-4-[(2,6-difluoro-4-

11/628659

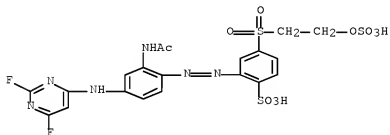
pyrimidinyl)amino]phenyl]diazenyl]-4-[[2-(sulfooxy)ethyl]sulfonyl]-,
sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 176449-24-4 HCAPLUS

CN Benzenesulfonic acid, 2-[2-[2-(acetylamino)-4-[(2,6-difluoro-4-pyrimidinyl)amino]phenyl]diazenyl]-4-[[2-(sulfooxy)ethyl]sulfonyl]-,
sodium salt (1:2) (CA INDEX NAME)

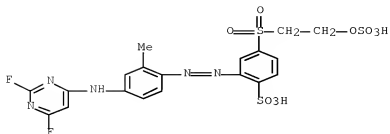


●2 Na

RN 176449-25-5 HCAPLUS

CN Benzenesulfonic acid, 2-[2-[4-[(2,6-difluoro-4-pyrimidinyl)amino]-2-methylphenyl]diazenyl]-4-[[2-(sulfooxy)ethyl]sulfonyl]-, sodium salt (1:2)
(CA INDEX NAME)

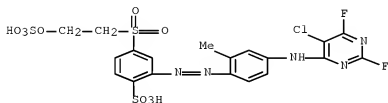
11/628659



● 2 Na

RN 176449-26-6 HCAPLUS

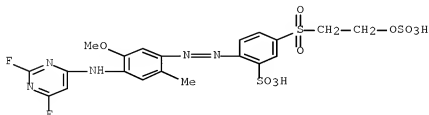
CN Benzenesulfonic acid, 2-[2-[4-[(5-chloro-2,6-difluoro-4-pyrimidinyl)amino]-2-methylphenyl]diazonyl]-4-[2-(sulfooxy)ethyl]sulfonyl-, sodium salt (1:2) (CA INDEX NAME)



● 2 Na

RN 176449-27-7 HCAPLUS

CN Benzenesulfonic acid, 2-[2-[4-[(2,6-difluoro-4-pyrimidinyl)amino]-5-methoxy-2-methylphenyl]diazonyl]-5-[2-(sulfooxy)ethyl]sulfonyl-, sodium salt (1:2) (CA INDEX NAME)

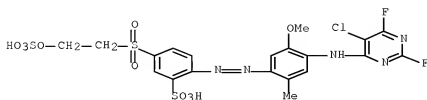


● 2 Na

RN 176449-28-8 HCAPLUS

11/628659

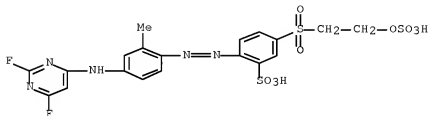
CN Benzenesulfonic acid, 2-[2-[4-[(5-chloro-2,6-difluoro-4-pyrimidinyl)amino]-5-methoxy-2-methylphenyl]diazenyl]-5-[[2-(sulfooxy)ethyl]sulfonyl]-, sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 176449-29-9 HCAPLUS

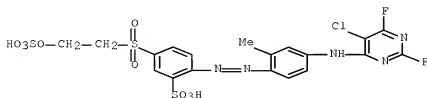
CN Benzenesulfonic acid, 2-[2-[4-[(2,6-difluoro-4-pyrimidinyl)amino]-2-methylphenyl]diazenyl]-5-[[2-(sulfooxy)ethyl]sulfonyl]-, sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 176449-30-2 HCAPLUS

CN Benzenesulfonic acid, 2-[2-[4-[(5-chloro-2,6-difluoro-4-pyrimidinyl)amino]-2-methylphenyl]diazenyl]-5-[[2-(sulfooxy)ethyl]sulfonyl]-, sodium salt (1:2) (CA INDEX NAME)

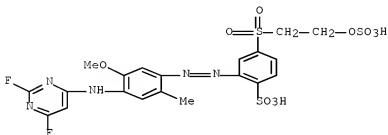


●2 Na

11/628659

RN 176449-31-3 HCAPLUS

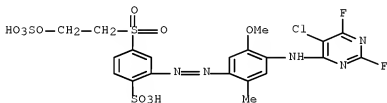
CN Benzenesulfonic acid, 2-[2-[4-[(2,6-difluoro-4-pyrimidinyl)amino]-5-methoxy-2-methylphenyl]diazenyl]-4-[[2-(sulfooxy)ethyl]sulfonyl]-, sodium salt (1:2) (CA INDEX NAME)



● 2 Na

RN 176449-32-4 HCAPLUS

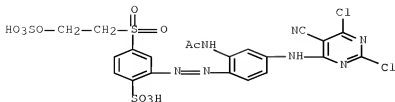
CN Benzenesulfonic acid, 2-[2-[4-[(5-chloro-2,6-difluoro-4-pyrimidinyl)amino]-5-methoxy-2-methylphenyl]diazenyl]-4-[[2-(sulfooxy)ethyl]sulfonyl]-, sodium salt (1:2) (CA INDEX NAME)



● 2 Na

RN 176449-34-6 HCAPLUS

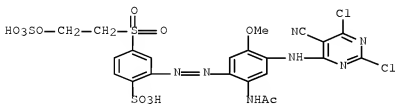
CN Benzenesulfonic acid, 2-[2-[2-(acetamino)-4-[(2,6-dichloro-5-cyano-4-pyrimidinyl)aminophenyl]diazenyl]-4-[[2-(sulfooxy)ethyl]sulfonyl]-, sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 176449-35-7 HCAPLUS

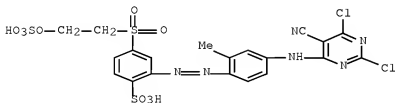
CN Benzenesulfonic acid, 2-[2-[2-(acetamino)-4-[(2,6-dichloro-5-cyano-4-pyrimidinyl)amino]-5-methoxyphenyl]diazenyl]-4-[[2-(sulfooxy)ethyl]sulfonyl]-, sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 176449-36-8 HCAPLUS

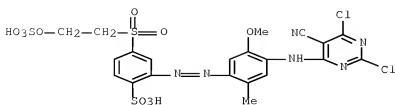
CN Benzenesulfonic acid, 2-[2-[4-[(2,6-dichloro-5-cyano-4-pyrimidinyl)amino]-2-methylphenyl]diazenyl]-4-[[2-(sulfooxy)ethyl]sulfonyl]-, sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 176449-37-9 HCAPLUS

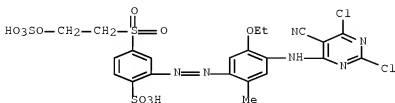
CN Benzenesulfonic acid, 2-[2-[4-[(2,6-dichloro-5-cyano-4-pyrimidinyl)amino]-5-methoxy-2-methylphenyl]diazenyl]-4-[[2-(sulfooxy)ethyl]sulfonyl]-, sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 176449-38-0 HCAPLUS

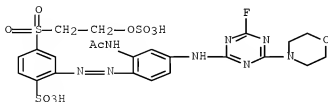
CN Benzenesulfonic acid, 2-[2-[4-[(2,6-dichloro-5-cyano-4-pyrimidinyl)amino]-5-ethoxy-2-methylphenyl]diazonyl]-4-[[2-(sulfooxy)ethyl]sulfonyl]-, sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 176449-40-4 HCAPLUS

CN Benzenesulfonic acid, 2-[[2-(acetylamino)-4-[[4-fluoro-6-(4-morpholinyl)-1,3,5-triazin-2-yl]amino]phenyl]azo]-4-[[2-(sulfooxy)ethyl]sulfonyl]-, dipotassium salt (9CI) (CA INDEX NAME)



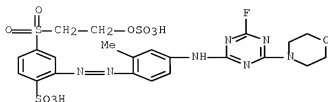
●2 K

RN 176449-41-5 HCAPLUS

CN Benzenesulfonic acid, 2-[[4-[[4-fluoro-6-(4-morpholinyl)-1,3,5-triazin-2-

11/628659

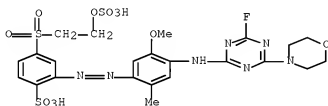
yl]amino]-2-methylphenyl]azo]-4-[[2-(sulfooxy)ethyl]sulfonyl]-,
dipotassium salt (9CI) (CA INDEX NAME)



● 2 K

RN 176449-42-6 HCAPLUS

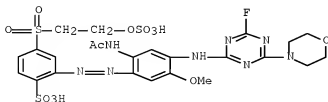
CN Benzenesulfonic acid, 2-[[4-[[4-fluoro-6-(4-morpholinyl)-1,3,5-triazin-2-yl]amino]-5-methoxy-2-methylphenyl]azo]-4-[[2-(sulfooxy)ethyl]sulfonyl]-, dipotassium salt (9CI) (CA INDEX NAME)



● 2 K

RN 176449-43-7 HCAPLUS

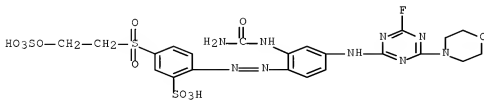
CN Benzenesulfonic acid, 2-[[2-(acetylamino)-4-[[4-fluoro-6-(4-morpholinyl)-1,3,5-triazin-2-yl]amino]-5-methoxyphenyl]azo]-4-[[2-(sulfooxy)ethyl]sulfonyl]-, dipotassium salt (9CI) (CA INDEX NAME)



● 2 K

RN 176449-44-8 HCAPLUS

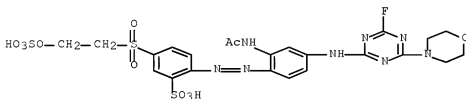
CN Benzenesulfonic acid, 2-[[2-[(aminocarbonyl)amino]-4-[[4-fluoro-6-(4-morpholinyl)-1,3,5-triazin-2-yl]amino]phenyl]azo]-5-[[2-(sulfooxy)ethyl]sulfonyl]-, dipotassium salt (9CI) (CA INDEX NAME)



● 2 K

RN 176449-45-9 HCAPLUS

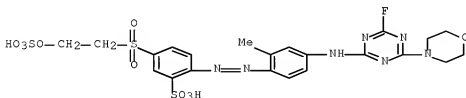
CN Benzenesulfonic acid, 2-[[2-(acetylamino)-4-[[4-fluoro-6-(4-morpholinyl)-1,3,5-triazin-2-yl]amino]phenyl]azo]-5-[[2-(sulfooxy)ethyl]sulfonyl]-, dipotassium salt (9CI) (CA INDEX NAME)



● 2 K

RN 176449-46-0 HCAPLUS

CN Benzenesulfonic acid, 2-[[4-[[4-fluoro-6-(4-morpholinyl)-1,3,5-triazin-2-yl]amino]-2-methylphenyl]azo]-5-[[2-(sulfooxy)ethyl]sulfonyl]-, dipotassium salt (9CI) (CA INDEX NAME)

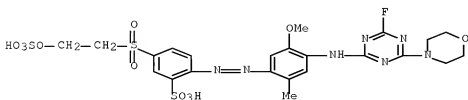


● 2 K

RN 176449-47-1 HCAPLUS

11/628659

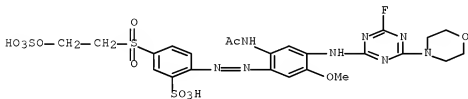
CN Benzenesulfonic acid, 2-[[4-[[4-fluoro-6-(4-morpholinyl)-1,3,5-triazin-2-yl]amino]-5-methoxy-2-methylphenyl]azo]-5-[[2-(sulfooxy)ethyl]sulfonyl]-, dipotassium salt (9CI) (CA INDEX NAME)



● 2 K

RN 176449-48-2 HCAPLUS

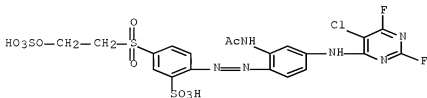
CN Benzenesulfonic acid, 2-[[2-(acetylamino)-4-[[4-fluoro-6-(4-morpholinyl)-1,3,5-triazin-2-yl]amino]-5-methoxyphenyl]azo]-5-[[2-(sulfooxy)ethyl]sulfonyl]-, dipotassium salt (9CI) (CA INDEX NAME)



● 2 K

RN 177347-90-9 HCAPLUS

CN Benzenesulfonic acid, 2-[2-[2-(acetylamino)-4-[(5-chloro-2,6-difluoro-4-pyrimidinyl)aminolphenyl]diazenyl]-5-[[2-(sulfooxy)ethyl]sulfonyl]-, sodium salt (1:2) (CA INDEX NAME)



● 2 Na

IT 110-91-8, Morpholine, reactions 675-14-9, Cyanuric fluoride 697-83-6, 5-Chloro-2,4,6-trifluoropyrimidine

11/628659

3029-64-9, 2,4,6-Trichloro-5-cyanopyrimidine 93696-22-1,
2,4-Difluoro-6-morpholino-1,3,5-triazine
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of bifunctionally reactive monoazo dyes for
cotton and leather)

RN 110-91-8 HCAPLUS
CN Morpholine (CA INDEX NAME)



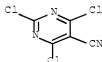
RN 675-14-9 HCAPLUS
CN 1,3,5-Triazine, 2,4,6-trifluoro- (CA INDEX NAME)



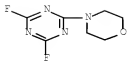
RN 697-83-6 HCAPLUS
CN Pyrimidine, 5-chloro-2,4,6-trifluoro- (CA INDEX NAME)



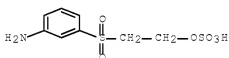
RN 3029-64-9 HCAPLUS
CN 5-Pyrimidinecarbonitrile, 2,4,6-trichloro- (CA INDEX NAME)



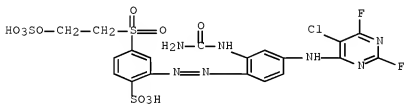
RN 93696-22-1 HCAPLUS
CN 1,3,5-Triazine, 2,4-difluoro-6-(4-morpholinyl)- (CA INDEX NAME)



IT 2494-88-4, 3-Aminophenyl β -sulfatoethyl sulfone
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (sulfonation of)
 RN 2494-88-4 HCAPLUS
 CN Ethanol, 2-[(3-aminophenyl)sulfonyl]-, 1-(hydrogen sulfate) (CA INDEX NAME)



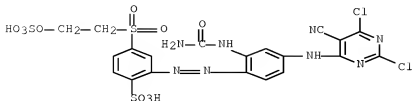
IT 176449-18-6P
 RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PREP (Preparation); PROC (Process); USES (Uses)
 (yellow; preparation of bifunctionally reactive monoazo dyes for cotton and leather)
 RN 176449-18-6 HCAPLUS
 CN Benzenesulfonic acid, 2-[2-[2-[(aminocarbonyl)amino]-4-[(5-chloro-2,6-difluoro-4-pyrimidinyl)amino]phenyl]diazenyl]-4-[[2-(sulfooxy)ethyl]sulfonyl]-, sodium salt (1:2) (CA INDEX NAME)



● 2 Na

IT 176449-33-5P 176449-39-1P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (yellow; preparation of bifunctionally reactive monoazo dyes for cotton and leather)
 RN 176449-33-5 HCAPLUS
 CN Benzenesulfonic acid, 2-[2-[2-[(aminocarbonyl)amino]-4-[(2,6-dichloro-5-cyano-4-pyrimidinyl)amino]phenyl]diazenyl]-4-[[2-(sulfooxy)ethyl]sulfonyl]-

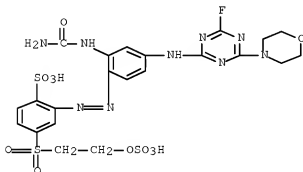
, sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 176449-39-1 HCAPLUS

CN Benzenesulfonic acid, 2-[[2-[(aminocarbonyl)amino]-4-[[4-fluoro-6-(4-morpholinyl)-1,3,5-triazin-2-yl]amino]phenyl]azo]-4-[[2-(sulfooxy)ethyl]sulfonyl]-, dipotassium salt (9CI) (CA INDEX NAME)



●2 K

IC ICM C09B062-028

ICS C09B062-245; C09B062-085; C09B062-51

ICA C09B067-22

CC 41-3 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)

Section cross-reference(s): 40, 45

ST reactive azo dye cotton textile;
leather reactive azo dye;
sulfoethyl sulfone reactive azo dye;
halopyrimidine reactive azo dye

IT leather
(dyeing or printing of cotton or leather with
bifunctionally reactive monoazo dyes)

IT Dyeing
Textile printing
(of cotton or leather with bifunctionally reactive
monoazo dyes)

- IT Dyes, reactive
(azo, bifunctional; reactive monoazo dyes
and their preparation and use)
- IT 25711-72-2, (m-Aminophenyl)urea
RL: RCT (Reactant); RACT (Reactant or reagent)
(coupling component; preparation of bifunctionally reactive
monoazo dyes for cotton and leather)
- IT 41261-80-7F, 2-Amino-4-(β -
sulphatoethylsulfonyl)benzenesulfonic acid 174491-68-0F
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
(Reactant or reagent)
(intermediate; preparation of bifunctionally reactive monoazo
dyes for cotton and leather)
- IT 176449-19-7P 176449-20-0P 176449-21-1P
176449-22-2P 176449-23-3P 176449-24-4P
176449-25-5P 176449-26-6P 176449-27-7P
176449-28-8P 176449-29-9P 176449-30-2P
176449-31-3P 176449-32-4P 176449-34-6P
176449-35-7P 176449-36-8P 176449-37-9P
176449-38-0P 176449-40-4P 176449-41-5P
176449-42-6P 176449-43-7P 176449-44-8P
176449-45-9P 176449-46-0P 176449-47-1P
176449-48-2P 177347-90-9P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material
use); PREP (Preparation); USES (Uses)
(preparation of bifunctionally reactive monoazo dyes for
cotton and leather)
- IT 110-91-8, Morpholine, reactions 675-14-9, Cyanuric
fluoride 697-83-6, 5-Chloro-2,4,6-trifluoropyrimidine
3029-64-9, 2,4,6-Trichloro-5-cyanopyrimidine 93696-22-1,
2,4-Difluoro-6-morpholino-1,3,5-triazine
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of bifunctionally reactive monoazo dyes for
cotton and leather)
- IT 2494-88-4, 3-Aminophenyl β -sulphatoethyl sulfone
RL: RCT (Reactant); RACT (Reactant or reagent)
(sulfonation of)
- IT 176449-18-6P
RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical
process); TEM (Technical or engineered material use); PREP (Preparation);
PROC (Process); USES (Uses)
(yellow; preparation of bifunctionally reactive monoazo
dyes for cotton and leather)
- IT 176449-33-5P 176449-39-1P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material
use); PREP (Preparation); USES (Uses)
(yellow; preparation of bifunctionally reactive monoazo
dyes for cotton and leather)

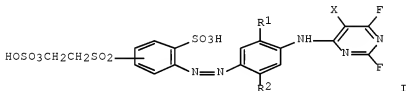
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 17 OF 24 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1996:167610 HCAPLUS Full-text
DOCUMENT NUMBER: 124:204933
ORIGINAL REFERENCE NO.: 124:37849a,37852a
TITLE: Reactive monoazo dyes, their
preparation and their use
Lehr, Friedrich
INVENTOR(S): Sandoz-Patent-GmbH, Germany
PATENT ASSIGNEE(S):
SOURCE: Ger. Offen., 7 pp.

DOCUMENT TYPE: CODEN: GWXXBX
 LANGUAGE: Patent
 German
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4425222	A1	19960118	DE 1994-4425222	19940716 <--
WO 9602593	A1	19960201	WO 1995-EP2779	19950714 <--
W: BR, CN, JP, KR, MX, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
ZA 9505893	A	19970114	ZA 1995-5893	19950714 <--
EP 772652	A1	19970514	EP 1995-926893	19950714 <--
EP 772652	B1	20010829		
R: CH, DE, ES, FR, GB, IT, LI, PT				
CN 1152930	A	19970625	CN 1995-194146	19950714 <--
CN 1090655	C	20020911		
BR 9508283	A	19971223	BR 1995-8283	19950714 <--
JP 10504330	T	19980428	JP 1996-504698	19950714 <--
JP 3829992	B2	20061004		
ES 2162931	T3	20020116	ES 1995-926893	19950714 <--
PT 772652	T	20020228	PT 1995-926893	19950714 <--
US 5747657	A	19980505	US 1997-765786	19970114 <--
PRIORITY APPLN. INFO.:			DE 1994-4425222	A 19940716 <--
			DE 1994-4435380	A 19941004 <--
			WO 1995-EP2779	W 19950714 <--

OTHER SOURCE(S): CASREACT 124:204933; MARPAT 124:204933
 GI

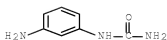


AB The dyes (I; R1 = H, Me, OMe; R2 = H, Me, AcNH, ureido; X = H, Cl) are obtained from 5-chloro-2,4,6-trifluoropyrimidine (II) or tetrafluoropyrimidine and the requisite aminophenylazobenzenesulfonic acid derivative I show good fastness when used to dye or print leather or cellulosics. Thus, 3-(β-sulfatoethylsulfonyl)aniline was sulfated and the product was diazotized and coupled with m-aminophenylurea to give a substituted aniline which was condensed with II to provide a dye (λmax 378 nm) which conferred fast golden yellow shades on cotton.

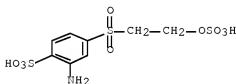
IT 25711-72-2, m-Aminophenylurea
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (coupling component; reactive monoazo dyes for cellulosics and leather)

RN 25711-72-2 HCAPLUS

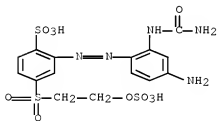
CN Urea, N-(3-aminophenyl)- (CA INDEX NAME)



IT 41261-80-7P, 2-Amino-4-(2-sulfatoethylsulfonyl)benzenesulfonic acid
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (intermediate, diazo component; reactive monoazo dyes for cellulose and leather)
 RN 41261-80-7 HCAPLUS
 CN Benzenesulfonic acid, 2-amino-4-[[2-(sulfooxy)ethyl]sulfonyl]- (CA INDEX NAME)



IT 174491-68-0P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (intermediate; reactive monoazo dyes for cellulose and leather)
 RN 174491-68-0 HCAPLUS
 CN Benzenesulfonic acid, 2-[2-[4-amino-2-[(aminocarbonyl)amino]phenyl]diazonyl]-4-[[2-(sulfooxy)ethyl]sulfonyl]- (CA INDEX NAME)



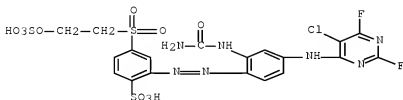
IT 174491-52-2P 174491-53-3P 174491-54-4P
 174491-55-5P 174491-56-6P 174491-57-7P
 174491-58-8P 174491-59-9P 174491-60-2P
 174491-61-3P 174491-62-4P 174491-63-5P
 174491-64-6P 174491-65-7P 174491-66-8P
 174491-67-9P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

11/628659

(reactive monoazo dyes for cellulose and leather)

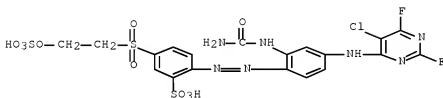
RN 174491-52-2 HCAPLUS

CN Benzenesulfonic acid, 2-[2-[2-[(aminocarbonyl)amino]-4-[(5-chloro-2,6-difluoro-4-pyrimidinyl)amino]phenyl]diazenyl]-4-[[2-(sulfoxy)ethyl]sulfonyl]- (CA INDEX NAME)



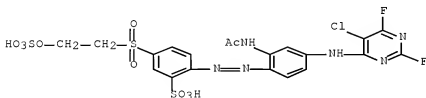
RN 174491-53-3 HCAPLUS

CN Benzenesulfonic acid, 2-[2-[2-[(aminocarbonyl)amino]-4-[(5-chloro-2,6-difluoro-4-pyrimidinyl)amino]phenyl]diazenyl]-5-[[2-(sulfoxy)ethyl]sulfonyl]- (CA INDEX NAME)



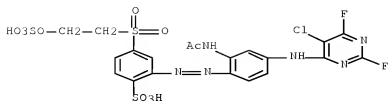
RN 174491-54-4 HCAPLUS

CN Benzenesulfonic acid, 2-[2-[2-(acetamino)-4-[(5-chloro-2,6-difluoro-4-pyrimidinyl)amino]phenyl]diazenyl]-5-[[2-(sulfoxy)ethyl]sulfonyl]- (CA INDEX NAME)



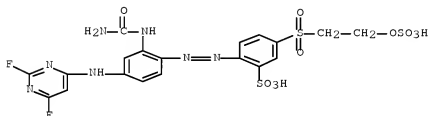
RN 174491-55-5 HCAPLUS

CN Benzenesulfonic acid, 2-[2-[2-(acetamino)-4-[(5-chloro-2,6-difluoro-4-pyrimidinyl)amino]phenyl]diazenyl]-4-[[2-(sulfoxy)ethyl]sulfonyl]- (CA INDEX NAME)



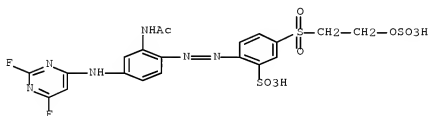
RN 174491-56-6 HCAPLUS

CN Benzenesulfonic acid, 2-[2-[2-(aminocarbonyl)amino]-4-[(2,6-difluoro-4-pyrimidinyl)amino]phenyl]diazenyl]-5-[2-(sulfooxy)ethyl]sulfonyl- (CA INDEX NAME)



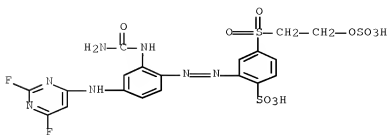
RN 174491-57-7 HCAPLUS

CN Benzenesulfonic acid, 2-[2-[2-(acetamido)amino]-4-[(2,6-difluoro-4-pyrimidinyl)amino]phenyl]diazenyl]-5-[2-(sulfooxy)ethyl]sulfonyl- (CA INDEX NAME)



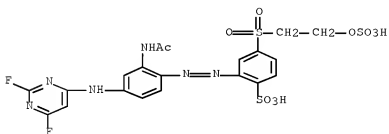
RN 174491-58-8 HCAPLUS

CN Benzenesulfonic acid, 2-[2-[2-(aminocarbonyl)amino]-4-[(2,6-difluoro-4-pyrimidinyl)amino]phenyl]diazenyl]-5-[2-(sulfooxy)ethyl]sulfonyl- (CA INDEX NAME)



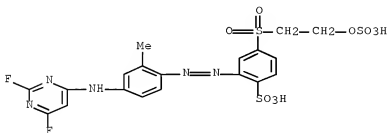
RN 174491-59-9 HCAPLUS

CN Benzenesulfonic acid, 2-[2-[2-(acetamido)-4-[(2,6-difluoro-4-pyrimidinyl)amino]phenyl]diazenyl]-4-[[2-(sulfooxy)ethyl]sulfonyl]- (CA INDEX NAME)



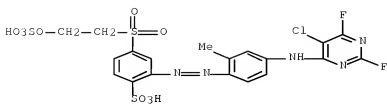
RN 174491-60-2 HCAPLUS

CN Benzenesulfonic acid, 2-[2-[4-[(2,6-difluoro-4-pyrimidinyl)amino]-2-methylphenyl]diazenyl]-4-[[2-(sulfooxy)ethyl]sulfonyl]- (CA INDEX NAME)



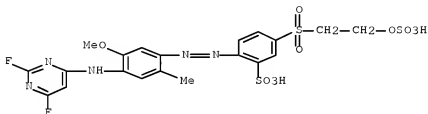
RN 174491-61-3 HCAPLUS

CN Benzenesulfonic acid, 2-[2-[4-[(5-chloro-2,6-difluoro-4-pyrimidinyl)amino]-2-methylphenyl]diazenyl]-4-[[2-(sulfooxy)ethyl]sulfonyl]- (CA INDEX NAME)



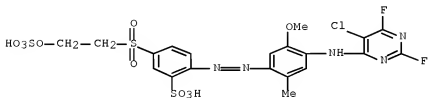
RN 174491-62-4 HCAPLUS

CN Benzenesulfonic acid, 2-[2-[4-[(2,6-difluoro-4-pyrimidinyl)amino]-5-methoxy-2-methylphenyl]diazenyl]-5-[[2-(sulfooxy)ethyl]sulfonyl]- (CA INDEX NAME)



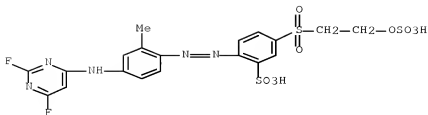
RN 174491-63-5 HCAPLUS

CN Benzenesulfonic acid, 2-[2-[4-[(5-chloro-2,6-difluoro-4-pyrimidinyl)amino]-5-methoxy-2-methylphenyl]diazenyl]-5-[[2-(sulfooxy)ethyl]sulfonyl]- (CA INDEX NAME)



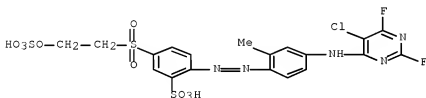
RN 174491-64-6 HCAPLUS

CN Benzenesulfonic acid, 2-[2-[4-[(2,6-difluoro-4-pyrimidinyl)amino]-2-methylphenyl]diazenyl]-5-[[2-(sulfooxy)ethyl]sulfonyl]- (CA INDEX NAME)



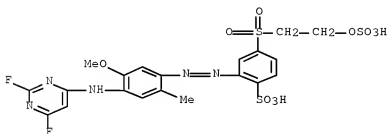
RN 174491-65-7 HCAPLUS

CN Benzenesulfonic acid, 2-[2-[4-[(5-chloro-2,6-difluoro-4-pyrimidinyl)amino]-2-methylphenyl]diazenyl]-5-[[2-(sulfooxy)ethyl]sulfonyl]- (CA INDEX NAME)



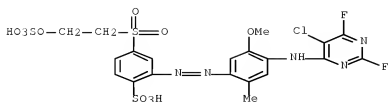
RN 174491-66-8 HCAPLUS

CN Benzenesulfonic acid, 2-[2-[4-[(2,6-difluoro-4-pyrimidinyl)amino]-5-methoxy-2-methylphenyl]diazenyl]-4-[[2-(sulfooxy)ethyl]sulfonyl]- (CA INDEX NAME)



RN 174491-67-9 HCAPLUS

CN Benzenesulfonic acid, 2-[2-[4-[(5-chloro-2,6-difluoro-4-pyrimidinyl)amino]-5-methoxy-2-methylphenyl]diazenyl]-4-[[2-(sulfooxy)ethyl]sulfonyl]- (CA INDEX NAME)



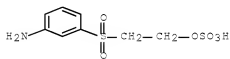
IT 697-83-6, 5-Chloro-2,4,6-trifluoropyrimidine 767-79-3,
 Tetrafluoropyrimidine 2494-88-4,
 3-(β-Sulfatoethylsulfonyl)aniline
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (starting material; reactive monoazo dyes for
 cellulose and leather)
 RN 697-83-6 HCAPLUS
 CN Pyrimidine, 5-chloro-2,4,6-trifluoro- (CA INDEX NAME)



RN 767-79-3 HCAPLUS
 CN Pyrimidine, 2,4,5,6-tetrafluoro- (CA INDEX NAME)



RN 2494-88-4 HCAPLUS
 CN Ethanol, 2-[(3-aminophenyl)sulfonyl]-, 1-(hydrogen sulfate) (CA INDEX NAME)



IC ICM C09B062-008
 ICS C09B067-22; C09B043-136; D06P001-38; D06P003-10; D06P003-66;
 D06P003-32; C07C317-32; C07D239-42
 ICA C09B062-51; C09B062-245; C09B029-085; D06P003-14; D06P003-24; D06P003-85;

D06P003-87; C09D011-02; C07C317-34; C07C245-08; C07C309-46
 41-3 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)
 Section cross-reference(s): 40, 45
 ST reactive azo dye prepn; cellulosic
 leather dyeing reactive azo
 IT leather
 (preparation of reactive monoazo dyes for cellulosics and leather)
 IT Dyes, reactive
 (azo, preparation of monoazo dyes for cellulosics and leather)
 IT Dyeing
 (reactive, of leather and cellulosics with prepared monoazo dyes)
 IT 25711-72-2, m-Aminophenylurea
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (coupling component; reactive monoazo dyes for cellulosics and leather)
 IT 41261-80-7F, 2-Amino-4-(2-sulfatoethylsulfonyl)benzenesulfonic acid
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (intermediate, diazo component; reactive monoazo dyes for cellulosics and leather)
 IT 174491-68-0P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (intermediate; reactive monoazo dyes for cellulosics and leather)
 IT 174491-52-2P 174491-53-3P 174491-54-4P
 174491-55-5P 174491-56-6P 174491-57-7P
 174491-58-8P 174491-59-9P 174491-60-2P
 174491-61-3P 174491-62-4P 174491-63-5P
 174491-64-6P 174491-65-7P 174491-66-8P
 174491-67-9P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (reactive monoazo dyes for cellulosics and leather)
 IT 697-83-6, 5-Chloro-2,4,6-trifluoropyrimidine 767-79-3, Tetrafluoropyrimidine 2494-88-4,
 3-(β -Sulfatoethylsulfonyl)aniline
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (starting material; reactive monoazo dyes for cellulosics and leather)

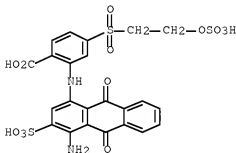
L31 ANSWER 18 OF 24 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1994:57143 HCAPLUS Full-text
 DOCUMENT NUMBER: 120:57143
 ORIGINAL REFERENCE NO.: 120:10387a,10390a
 TITLE: Manufacture of leather from reptile skin
 INVENTOR(S): Kitano, Eiichi
 PATENT ASSIGNEE(S): Kitano Kagaku Jugen, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05179300	A	19930720	JP 1992-18304	19920106 <--
JP 06055960	B	19940727		

PRIORITY APPLN. INFO.:

JP 1992-18304 19920106 <--

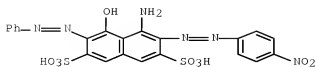
- AB Soft and wash-resistant leather from snakes and lizards, useful for sports product, handbags, and garments (no data), are manufactured using a fatliquoring agent comprising long-chain dialkylsulfosuccinate salts, long-chain monoalkyl phosphate ester, maleic anhydride-olefin copolymer, and diethylene glycol monobutyl ether. The method also features a 2-stage dyeing process using vinylsulfone type reactive dyes and then phosphated dyes and a 2-stage bleaching process using Na chlorite and then K permanganate and Na bisulfite.
- IT 20640-71-5
RL: USES (Uses)
(dyeing with, for reptile leather)
- RN 20640-71-5 HCAPLUS
- CN Benzoic acid, 2-[(4-amino-9,10-dihydro-9,10-dioxo-3-sulfo-1-anthracenyl)amino]-4-[[2-(sulfoxy)ethyl)sulfonyl]- (CA INDEX NAME)



- IC ICM C14C009-00
ICS C14C003-16; D06L003-02; D06L003-08; D06L003-14
- CC 45-3 (Industrial Organic Chemicals, Leather, Fats, and Waxes)
- ST leather manuf reptile skin; fatliquoring agent reptile leather manuf; bleaching dyeing reptile leather manuf
- IT Dyeing
(in manufacture of soft and wash-resistant reptile leather)
- IT Reptile
(leather from, manufacture of, soft and wash-resistant)
- IT Leather
(reptile, manufacture of soft and wash-resistant, fatliquoring agents in)
- IT Alkenes, polymers
RL: USES (Uses)
(polymers, with maleic anhydride, fatliquoring agent composition, for reptile leather)
- IT Bleaching
(two-stage, in manufacture of soft and wash-resistant reptile leather)
- IT 7631-90-5, Sodium bisulfite 7722-64-7, Potassium permanganate 7758-19-2, Sodium chlorite
RL: USES (Uses)
(bleaching agent, in manufacture of reptile leather)
- IT 20640-71-5

- RL: USES (Uses)
(dyeing with, for reptile leather)
- IT 108-31-6D, Maleic anhydride, alkene copolymer 112-34-5, Diethylene glycol monobutyl ether 5138-18-1D, Sulfosuccinic acid, C12-18 esters, sodium salts 7664-38-2D, Phosphoric acid, monoalkyl esters
RL: USES (Uses)
(fatliquoring agent composition, for reptile leather)
- L31 ANSWER 19 OF 24 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1993:583219 HCAPLUS Full-text
DOCUMENT NUMBER: 119:183219
ORIGINAL REFERENCE NO.: 119:32727a,32730a
TITLE: Characterizations of black dyes and their color fastness on leather
AUTHOR(S): Nakamura, Masashi
CORPORATE SOURCE: Leather Lab., Osaka Prefect. Ind. Technol. Res. Inst., Suita, 564, Japan
SOURCE: Hikaku Kagaku (Chemistry) (1991), 37(2), 89-102
CODEN: HIKAAF; ISSN: 0018-1811
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
- AB Com. black dyes were classified into 6 groups according to the Rf of the main spots on paper- and thin-layer chromatog. to establish a guide for selecting dyes to give good color fastness on leather. The relation was examined between Rf and dye properties (visible region absorption spectra) and dyeing properties on chrome leather (dye exhaustion, penetration, color strength of grain surface, fastness to light, rubbing, alkaline perspiration, and wet- or dry-cleaning). Color fastness increased with decreasing Rf, and the dyes with lowest Rf and with relatively stronger hydrophobicity and larger mol. weight showed the best color fastness.
- IT 1064-48-8, C.I. Acid Black 1 1787-61-7, C.I. Mordant Black 11 1937-37-7 2052-25-7 2538-85-4, C.I. Mordant Black 17 2945-96-2, C.I. Direct Black 17 3071-73-6, C.I. Acid Black 24 3564-14-5, C.I. Mordant Black 3 3618-58-4, C.I. Mordant Black 1 3618-60-8, C.I. Mordant Black 7 5979-27-1, C.I. Mordant Black 51 6262-07-3, C.I. Acid Black 26 6358-80-1, C.I. Acid Black 94 6409-86-5, C.I. Direct Black 97 6428-31-5, C.I. Direct Black 19 6428-38-2, C.I. Direct Black 32 6473-13-8, C.I. Direct Black 22 16894-32-9, C.I. Direct Black 122 17095-24-8, C.I. Reactive Black 5 32517-36-5, C.I. Acid Black 63 54804-85-2, C.I. Direct Black 154 57693-14-8, C.I. Acid Black 172
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(color fastness of, for dyeing of leather)
- RN 1064-48-8 HCAPLUS
- CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[2-(4-nitrophenyl)diazanyl]-6-(2-phenyldiazanyl)-, sodium salt (1:2) (CA INDEX NAME)

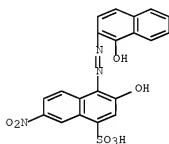
11/628659



● 2 Na

RN 1787-61-7 HCAPLUS

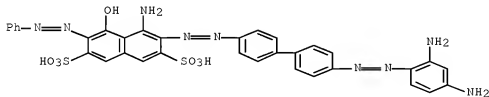
CN 1-Naphthalenesulfonic acid, 3-hydroxy-4-[2-(1-hydroxy-2-naphthalenyl)diazenyl]-7-nitro-, sodium salt (1:1) (CA INDEX NAME)



● Na

RN 1937-37-7 HCAPLUS

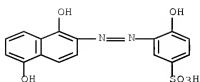
CN 2,7-Naphthalenedisulfonic acid, 4-amino-3-[2-[4'-(2-(2,4-diaminophenyl)diazenyl)][1,1'-biphenyl]-4-yl]diazenyl]-5-hydroxy-6-(2-phenyldiazenyl)-, sodium salt (1:2) (CA INDEX NAME)



● 2 Na

RN 2052-25-7 HCAPLUS

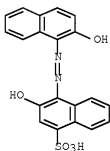
CN Benzenesulfonic acid, 3-[2-(1,5-dihydroxy-2-naphthalenyl)diazenyl]-4-hydroxy-, sodium salt (1:1) (CA INDEX NAME)



● Na

RN 2538-85-4 HCAPLUS

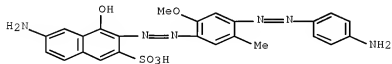
CN 1-Naphthalenesulfonic acid, 3-hydroxy-4-[2-(2-hydroxy-1-naphthalenyl)diazenyl]-, sodium salt (1:1) (CA INDEX NAME)



● Na

RN 2945-96-2 HCAPLUS

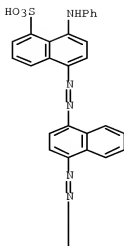
CN 2-Naphthalenesulfonic acid, 6-amino-3-[2-[4-[2-(4-aminophenyl)diazenyl]-2-methoxy-5-methylphenyl]diazenyl]-4-hydroxy-, sodium salt (1:1) (CA INDEX NAME)



● Na

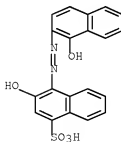
RN 3071-73-6 HCAPLUS

CN 1-Naphthalenesulfonic acid, 8-(phenylamino)-5-[2-[4-[2-(5-sulfo-1-naphthalenyl)diazenyl]-1-naphthalenyl]diazenyl]-, sodium salt (1:2) (CA INDEX NAME)



RN 3564-14-5 HCAPLUS

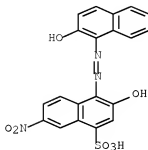
CN 1-Naphthalenesulfonic acid, 3-hydroxy-4-[2-(1-hydroxy-2-naphthalenyl)diazenyl]-, sodium salt (1:1) (CA INDEX NAME)



RN 3618-58-4 HCAPLUS

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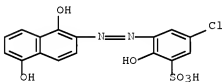
CN 1-Naphthalenesulfonic acid, 3-hydroxy-4-[2-(2-hydroxy-1-naphthalenyl)diazenyl]-7-nitro-, sodium salt (1:1) (CA INDEX NAME)



● Na

RN 3618-60-8 HCAPLUS

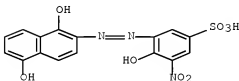
CN Benzenesulfonic acid, 5-chloro-3-[2-(1,5-dihydroxy-2-naphthalenyl)diazenyl]-2-hydroxy-, sodium salt (1:1) (CA INDEX NAME)



● Na

RN 5979-27-1 HCAPLUS

CN Benzenesulfonic acid, 3-[2-(1,5-dihydroxy-2-naphthalenyl)diazenyl]-4-hydroxy-5-nitro-, sodium salt (1:1) (CA INDEX NAME)



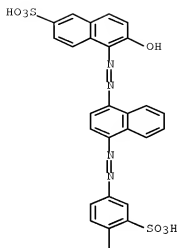
● Na

RN 6262-07-3 HCAPLUS

CN 2-Naphthalenesulfonic acid, 6-hydroxy-5-[2-[4-[2-(4-(phenylamino)-3-sulfophenyl)diazenyl]-1-naphthalenyl]diazenyl]-, sodium salt (1:2) (CA

INDEX NAME)

PAGE 1-A



PAGE 2-A

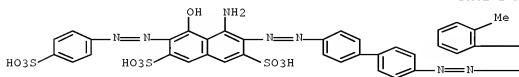


●2 Na

RN 6358-80-1 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[2-[4'-[2-[4-hydroxy-2-[(2-methylphenyl)amino]phenyl]diazenyl][1,1'-biphenyl]-4-yl]diazenyl]-6-[2-(4-sulfophenyl)diazenyl]-, sodium salt (1:3) (CA INDEX NAME)

PAGE 1-A

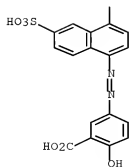
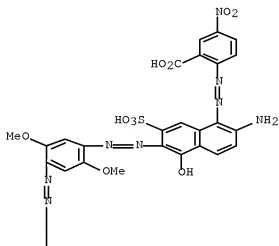


●3 Na



RN 6409-86-5 HCAPLUS

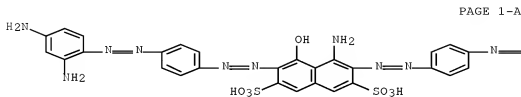
CN Benzoic acid, 2-[[[2-amino-6-[[[4-[[[4-(3-carboxy-4-hydroxyphenyl)azo]-7-sulfo-1-naphthalenyl]azo]-2,5-dimethoxyphenyl]azo]-5-hydroxy-7-sulfo-1-naphthalenyl]azo]-5-nitro-, tetrasodium salt (9CI) (CA INDEX NAME)



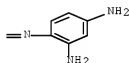
● 4 Na

RN 6428-31-5 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-3,6-bis[2-[4-[2-(2,4-diaminophenyl)diazenyl]phenyl]diazenyl]-5-hydroxy-, sodium salt (1:2) (CA INDEX NAME)

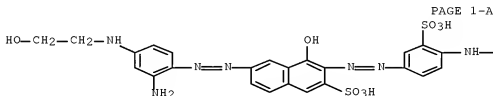


●2 Na

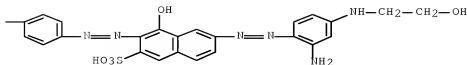


RN 6428-38-2 HCAPLUS

CN 2-Naphthalenesulfonic acid, 6-[2-[2-amino-4-[(2-hydroxyethyl)amino]phenyl]diazenyl]-3-[2-[4-[[4-[2-[7-[2-[2-amino-4-[(2-hydroxyethyl)amino]phenyl]diazenyl]-1-hydroxy-3-sulfo-2-naphthalenyl]diazenyl]phenyl]amino]-3-sulfo-phenyl]diazenyl]-4-hydroxy-, sodium salt (1:3) (CA INDEX NAME)

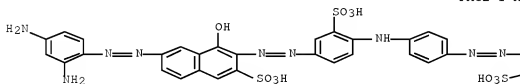


●3 Na

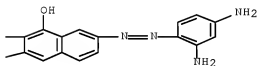


RN 6473-13-8 HCAPLUS

CN 2-Naphthalenesulfonic acid, 6-[2-(2,4-diaminophenyl)diazenyl]-3-[2-[4-[[4-[2-(7-[2-(2,4-diaminophenyl)diazenyl]-1-hydroxy-3-sulfo-2-naphthalenyl]diazenyl]phenyl]amino]-3-sulfo-phenyl]diazenyl]-4-hydroxy-, sodium salt (1:3) (CA INDEX NAME)

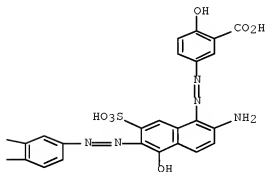
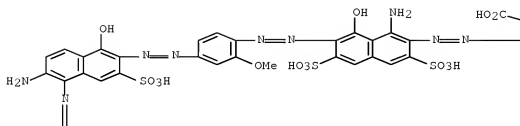


● 3 Na

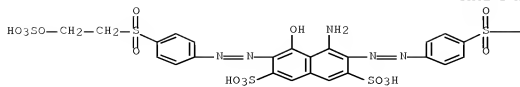


RN 16894-32-9 HCAPLUS

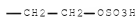
CN Benzoic acid, 2-[2-[1-amino-7-[2-[4-[2-[6-amino-5-[2-(3-carboxy-4-hydroxyphenyl)diazenyl]-1-hydroxy-3-sulfo-2-naphthalenyl]diazenyl]-2-methoxyphenyl]diazenyl]-8-hydroxy-3,6-disulfo-2-naphthalenyl]diazenyl]-5-[2-[6-amino-5-[2-(3-carboxy-4-hydroxyphenyl)diazenyl]-1-hydroxy-3-sulfo-2-naphthalenyl]diazenyl]- (CA INDEX NAME)



RN 17095-24-8 HCAPLUS
 CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3,6-bis[2-[4-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]diazenyl]-, sodium salt (1:4) (CA INDEX NAME)

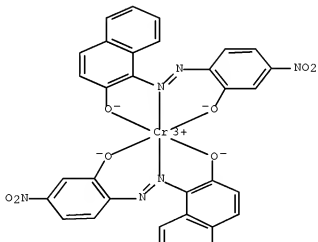


● 4 Na



RN 32517-36-5 HCAPLUS

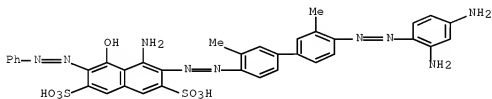
CN Chromate(1-), bis[1-[2-(hydroxy-κO)-4-nitrophenyl]diazanyl-2-naphthalenolato(2-)-κO]-, hydrogen (1:1), (OC-6-22')- (CA INDEX NAME)





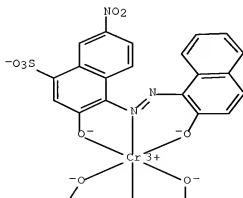
RN 54804-85-2 HCAPLUS

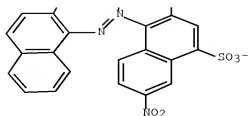
CN 2,7-Naphthalenedisulfonic acid, 4-amino-3-[2-[4'-(2-(2,4-diaminophenyl)diazenyl)-3,3'-dimethyl[1,1'-biphenyl]-4-yl]diazenyl]-5-hydroxy-6-(2-phenyldiazenyl)-, sodium salt (1:2) (CA INDEX NAME)



RN 57693-14-8 HCAPLUS

CN Chromate(3-), bis[3-(hydroxy-κO)-4-[2-[2-(hydroxy-κO)-1-naphthalenyl]diazenyl-κN1]-7-nitro-1-naphthalenesulfonato(3-)]-, sodium (1:3) (CA INDEX NAME)





● 3 Na⁺

CC 45-2 (Industrial Organic Chemicals, Leather, Fats, and Waxes)
 Section cross-reference(s): 41
 ST azo dye leather dyeing; color
 fastness black dye leather
 IT Leather
 (azo dyes for, color fastness of)
 IT Dyes, azo
 (color fastness of, for dyeing of leather)
 IT Dyeing
 (of leather, with azo dyes)
 IT Molecular structure-property relationship
 (fastness, color fastness, of azo dyes for
 dyeing of leather)
 IT 1064-48-8, C.I. Acid Black 1 1326-83-6, C.I. Solubilized Sulfur
 Black 1 1787-61-7, C.I. Mordant Black 11 1937-37-7
 2052-25-7 2538-85-4, C.I. Mordant Black 17
 2945-96-2, C.I. Direct Black 17 3071-73-6, C.I. Acid
 Black 24 3564-14-5, C.I. Mordant Black 3 3618-58-4,
 C.I. Mordant Black 1 3618-60-8, C.I. Mordant Black 7
 5610-64-0, C.I. Acid Black 52 5979-27-1, C.I. Mordant Black 51
 6262-07-3, C.I. Acid Black 26 6358-80-1, C.I. Acid Black
 94 6409-86-5, C.I. Direct Black 97 6428-31-5, C.I.
 Direct Black 19 6428-38-2, C.I. Direct Black 32
 6473-13-8, C.I. Direct Black 22 8005-03-6, C.I. Acid Black 2
 8005-33-2, C.I. Natural Black 1 12217-14-0, C.I. Acid Black 29
 12217-18-4, C.I. Acid Black 109 12218-96-1, C.I. Acid Black 158
 12218-97-2, C.I. Acid Black 110 12218-98-3, C.I. Acid Black 113
 12219-09-9, C.I. Acid Black 155 12224-60-1, C.I. Mordant Black 84
 12238-86-7, C.I. Acid Black 164 16894-32-9, C.I. Direct Black
 122 17095-24-8, C.I. Reactive Black 5
 32517-36-5, C.I. Acid Black 63 50813-24-6, Aizen Cathilon Black
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 Black 177 61901-10-8, C.I. Acid Black 183 61901-28-8, C.I. Acid Black
 179 61931-02-0, C.I. Acid Black 194 63641-84-9, C.I. Acid Black 190
 80748-19-2, C.I. Direct Black 108 85854-35-9, C.I. Acid Black 119
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 Black MH 150428-45-8, Aizen Cathilon Black NH 150428-49-2, Basic Black
 MD 150428-57-2, Corvolin BT 150428-58-3, C.I. Acid Black 189
 150428-59-4, C.I. Mordant Black 54 150428-74-3, Leather Black
 HD

RL: PRP (Properties); TEM (Technical or engineered material use); USES
(Uses)

(color fastness of, for dyeing of leather)

L31 ANSWER 20 OF 24 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1993:474525 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 119:74525

ORIGINAL REFERENCE NO.: 119:13417a,13420a

TITLE: Reactive dye compositions and
dyeing and printing textiles and
leather therewith

INVENTOR(S): Akahori, Kingo; Kashiwano, Yutaka; Harada, Naoki

PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokyo Koho, 16 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

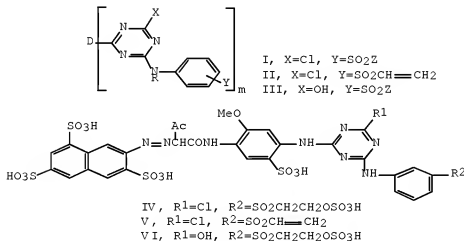
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04370157	A	19921222	JP 1991-147261	19910619 <--
PRIORITY APPLN. INFO.:			JP 1991-147261	19910619 <--
OTHER SOURCE(S):	MARPAT	119:74525		

GI



AB The title compns. showing good buildup, solubility, storability, and fastness properties comprise I and ≥ 1 of II and III in free-acid forms (D = sulfo group-containing azo, metalized azo, anthraquinone, phthalocyanine, formazan, dioxazine dye residue; R = H, Me, Et; Z = vinyl, CH₂CH₂Z₁; Z₁ = alkali-removable group; m = 1, 2; the Y to NR locant relation is similar in I and II) in (II + III):I weight ratio 1-60:100. Cotton was dyed fast yellow with a dye liquor containing IV 100, V 10, and VI 1 parts.

IT 80315-16-8 85946-16-3 85946-20-9

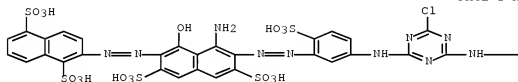
104256-91-9 105936-66-1 105956-68-1
 107143-06-6 109295-78-5 109295-80-9
 115662-23-2 131733-83-0 139261-22-6
 149124-57-2 149124-58-3 149124-59-4
 149124-60-7 149124-61-8 149124-62-9
 149124-63-0 149124-64-1 149124-65-2
 149124-66-3 149124-67-4 149124-68-5
 149124-69-6 149124-70-9 149124-71-0
 149124-72-1

RL: USES (Uses)

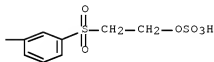
(mixed reactive azo dyes containing, for
 cotton and leather)

RN 80315-16-8 HCAPLUS

CN 1,5-Naphthalenedisulfonic acid, 2-[2-[8-amino-7-[2-[5-[4-chloro-6-[[3-[(2-(sulfoxy)ethyl)sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-2-sulphophenyl]diazenyl]-1-hydroxy-3,6-disulfo-2-naphthalenyl]diazenyl]- (CA INDEX NAME)

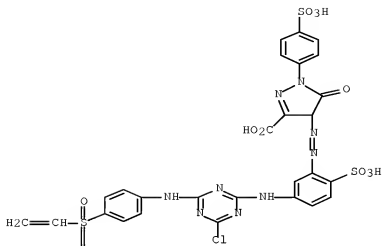


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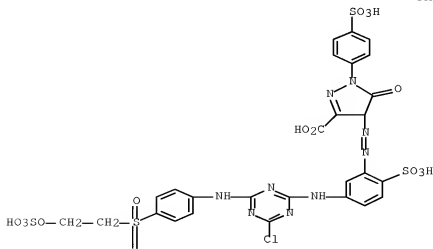
RN 85946-16-3 HCAPLUS

CN 1H-Pyrazole-3-carboxylic acid, 4-[2-[5-[4-chloro-6-[[4-(ethenylsulfonyl)phenyl]amino]-1,3,5-triazin-2-yl]amino]-2-sulphophenyl]diazenyl]-4,5-dihydro-5-oxo-1-(4-sulphophenyl)- (CA INDEX NAME)



RN 85946-20-9 HCAPLUS

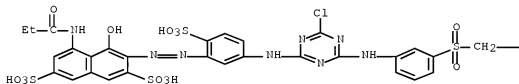
CN 1H-Pyrazole-3-carboxylic acid, 4-[2-[5-[[4-chloro-6-[[[4-[[2-(sulfooxy)ethylsulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-2-sulphophenyl]diazonyl]-4,5-dihydro-5-oxo-1-(4-sulphophenyl)- (CA INDEX NAME)



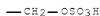


RN 104256-91-9 HCAPLUS
 CN 2,7-Naphthalenedisulfonic acid, 3-[2-[5-[[4-chloro-6-[[3-[[2-(sulfooxy)ethylsulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-2-sulphophenyl]diazenyl]-4-hydroxy-5-[(1-oxopropyl)amino]- (CA INDEX NAME)

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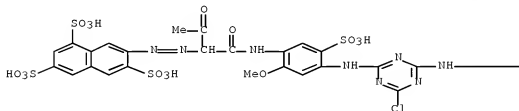


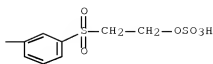
PAGE 1-B



RN 105936-66-1 HCAPLUS
 CN 1,3,6-Naphthalenetrisulfonic acid, 7-[2-[1-[[[4-[4-chloro-6-[[3-[[2-(sulfooxy)ethylsulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-2-methoxy-5-sulphophenyl]amino]carbonyl]-2-oxopropyl]diazenyl]- (CA INDEX NAME)

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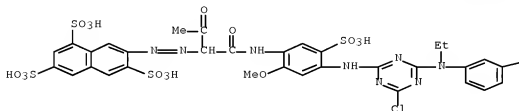




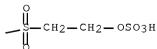
RN 105956-68-1 HCAPLUS

CN 1,3,6-Naphthalenetrisulfonic acid,
 7-[2-[1-[[[4-[4-chloro-6-[ethyl[3-[[2-(sulfooxy)ethyl)sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-2-methoxy-5-sulphophenyl]amino]carbonyl]-2-oxopropyl]diazenyl]- (CA INDEX NAME)

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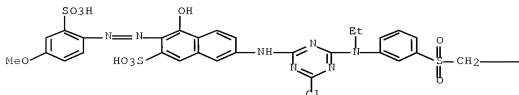
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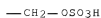
RN 107143-06-6 HCAPLUS

CN 2-Naphthalenesulfonic acid, 7-[[4-chloro-6-[ethyl[3-[[2-(sulfooxy)ethyl)sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-4-hydroxy-3-[2-(4-methoxy-2-sulphophenyl)diazenyl]- (CA INDEX NAME)

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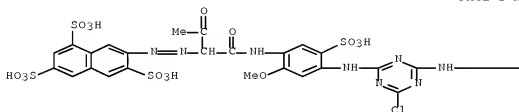
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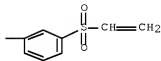
RN 109295-78-5 HCAPLUS

CN 1,3,6-Naphthalenetrisulfonic acid,
7-[2-[1-[[[4-[4-chloro-6-[[3-(ethenylsulfonyl)phenyl]amino]-1,3,5-triazin-2-yl]amino]-2-methoxy-5-sulfophenyl]amino]carbonyl]-2-oxopropyl]diazenyl]-
(CA INDEX NAME)

PAGE 1-A



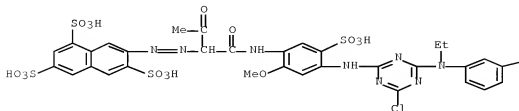
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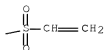
RN 109295-80-9 HCAPLUS

CN 1,3,6-Naphthalenetrisulfonic acid,
7-[2-[1-[[[4-[4-chloro-6-[[3-(ethenylsulfonyl)phenyl]ethylamino]-1,3,5-triazin-2-yl]amino]-2-methoxy-5-sulfophenyl]amino]carbonyl]-2-oxopropyl]diazenyl]- (CA INDEX NAME)

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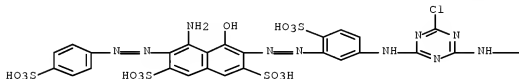
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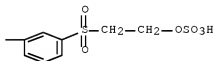
RN 115662-23-2 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-6-[2-[5-[[4-chloro-6-[[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-2-sulfophenyl]diazenyl]-5-hydroxy-3-[2-(4-sulfophenyl)diazenyl]- (CA INDEX NAME)

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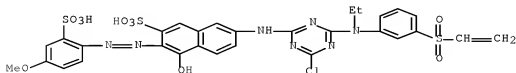


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RN 131733-83-0 HCAPLUS

CN 2-Naphthalenesulfonic acid, 7-[[4-chloro-6-[[3-(ethenylsulfonyl)phenyl]ethylamino]-1,3,5-triazin-2-yl]amino]-4-hydroxy-3-[2-(4-methoxy-2-sulfophenyl)diazenyl]- (CA INDEX NAME)



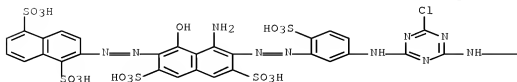
RN 139261-22-6 HCAPLUS

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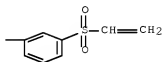
11/628659

(ethenylsulfonyl)phenyl]amino]-1,3,5-triazin-2-yl]amino]-2-sulfo-phenyl]diazanyl]-1-hydroxy-3,6-disulfo-2-naphthalenyl]diazanyl]- (CA INDEX NAME)

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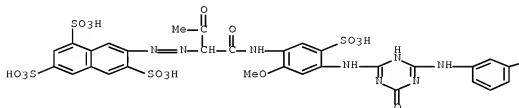


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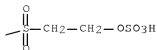


RN 149124-57-2 HCAPLUS
CN 1,3,6-Naphthalenetrisulfonic acid,
7-[2-[1-[[[4-[[3,4-dihydro-4-oxo-6-[[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-2-methoxy-5-sulfo-phenyl]amino]carbonyl]-2-oxopropyl]diazanyl]- (CA INDEX NAME)

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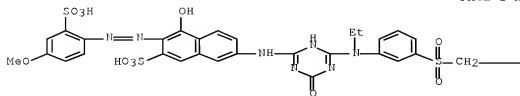
PAGE 1-B



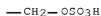
RN 149124-58-3 HCAPLUS

CN 2-Naphthalenesulfonic acid, 7-[[6-[ethyl{3-[[2-(sulfooxy)ethylsulfonyl]phenyl]amino]-1,4-dihydro-4-oxo-1,3,5-triazin-2-yl]amino]-4-hydroxy-3-[(4-methoxy-2-sulfophenyl)azo]- (9CI) (CA INDEX NAME)

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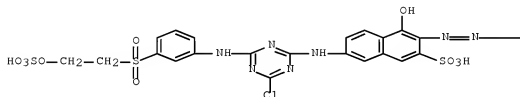
PAGE 1-B



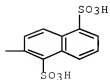
RN 149124-59-4 HCAPLUS

CN 1,5-Naphthalenedisulfonic acid, 2-[2-[6-[[4-chloro-6-[[3-[[2-(sulfooxy)ethylsulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthalenyl]diazonyl]- (CA INDEX NAME)

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PAGE 1-B



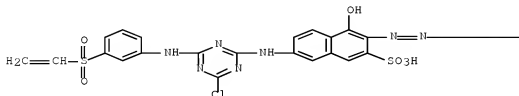
RN 149124-60-7 HCAPLUS

CN 1,5-Naphthalenedisulfonic acid, 2-[2-[6-[[4-chloro-6-[[3-

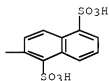
11/628659

(ethenylsulfonyl)phenyl]amino]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthalenyl]diazonyl]- (CA INDEX NAME)

PAGE 1-A



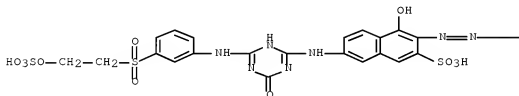
PAGE 1-B



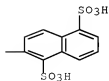
RN 149124-61-8 HCAPLUS

CN 1,5-Naphthalenedisulfonic acid, 2-[2-[6-[[[5,6-dihydro-6-oxo-4-[[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthalenyl]diazonyl]- (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

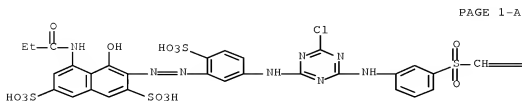


RN 149124-62-9 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 3-[2-[5-[[4-chloro-6-[[3-

11/628659

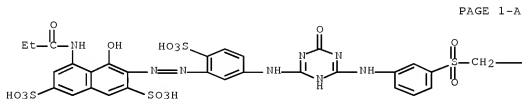
(ethenylsulfonyl)phenyl]amino]-1,3,5-triazin-2-yl]amino]-2-sulfo-
phenyl]diazenyl]-4-hydroxy-5-[(1-oxopropyl)amino]- (CA INDEX NAME)



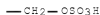
PAGE 1-B



RN 149124-63-0 HCAPLUS
CN 2,7-Naphthalenedisulfonic acid, 3-[2-[5-[[[5,6-dihydro-6-oxo-4-[[3-[[2-(sulfooxy)ethylsulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-2-sulfo-phenyl]diazenyl]-4-hydroxy-5-[(1-oxopropyl)amino]- (CA INDEX NAME)

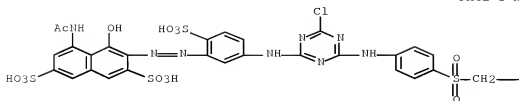


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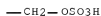


RN 149124-64-1 HCAPLUS
CN 2,7-Naphthalenedisulfonic acid, 5-(acetylamino)-3-[2-[5-[[[4-chloro-6-[[4-[[2-(sulfooxy)ethylsulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-2-sulfo-phenyl]diazenyl]-4-hydroxy- (CA INDEX NAME)

PAGE 1-A



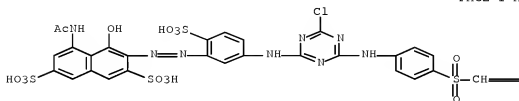
PAGE 1-B



RN 149124-65-2 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 5-(acetylamino)-3-[2-[5-[[4-chloro-6-[[4-(ethenylsulfonyl)phenyl]amino]-1,3,5-triazin-2-yl]amino]-2-sulphophenyl]diazenyl]-4-hydroxy- (CA INDEX NAME)

PAGE 1-A



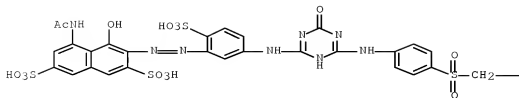
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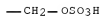
RN 149124-66-3 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 5-(acetylamino)-3-[2-[5-[[[3,4-dihydro-4-oxo-6-[[4-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-2-sulphophenyl]diazenyl]-4-hydroxy- (CA INDEX NAME)

PAGE 1-A



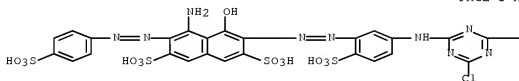
PAGE 1-B



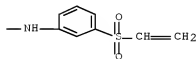
RN 149124-67-4 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-6-[2-[5-[[4-chloro-6-[[3-(ethenylsulfonyl)phenyl]amino]-1,3,5-triazin-2-yl]amino]-2-sulphophenyl]diazenyl]-5-hydroxy-3-[2-(4-sulphophenyl)diazenyl]- (CA INDEX NAME)

PAGE 1-A

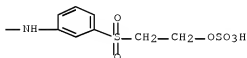
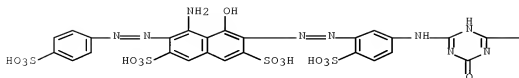


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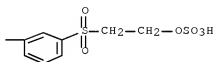
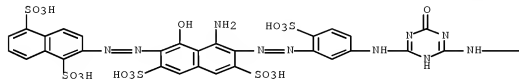
RN 149124-68-5 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-6-[2-[5-[[5,6-dihydro-6-oxo-4-[[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-2-sulphophenyl]diazenyl]-5-hydroxy-3-[2-(4-sulphophenyl)diazenyl]- (CA INDEX NAME)



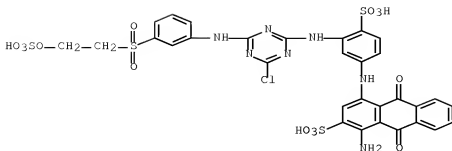
RN 149124-69-6 HCAPLUS

CN 1,5-Naphthalenedisulfonic acid, 2-[2-[8-amino-7-[2-[5-[[5,6-dihydro-6-oxo-4-[[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-2-sulphophenyl]diazenyl]-1-hydroxy-3,6-disulfo-2-naphthalenyl]diazenyl]- (CA INDEX NAME)



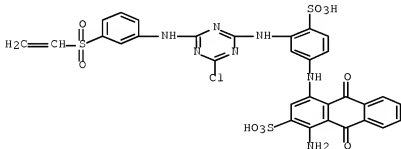
RN 149124-70-9 HCAPLUS

CN 2-Anthracenesulfonic acid, 1-amino-4-[[3-[[4-chloro-6-[[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-4-sulphophenyl]amino]-9,10-dihydro-9,10-dioxo- (CA INDEX NAME)



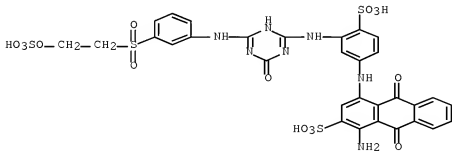
RN 149124-71-0 HCAPLUS

CN 2-Anthracenesulfonic acid, 1-amino-4-[[3-[[[4-chloro-6-[[3-(ethenylsulfonyl)phenyl]amino]-1,3,5-triazin-2-yl]amino]-4-sulfophenyl]amino]-9,10-dihydro-9,10-dioxo- (CA INDEX NAME)



RN 149124-72-1 HCAPLUS

CN 2-Anthracenesulfonic acid, 1-amino-4-[[3-[[[3,4-dihydro-4-oxo-6-[[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-4-sulfophenyl]amino]-9,10-dihydro-9,10-dioxo- (CA INDEX NAME)



IC ICM C09B062-503

ICS C09B062-505; C09B062-51; C09B062-513; C09B062-515; C09B062-517;
C09B067-22; D06P001-384

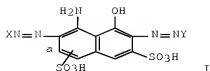
CC 40-6 (Textiles and Fibers)

Section cross-reference(s): 41, 45
 ST reactive azo dye mixt cotton;
 leather reactive azo dye mixt
 IT leather
 (mixed reactive azo dyes for)
 IT Textile printing
 (of cotton, mixed reactive azo dyes for)
 IT Printing, nonimpact
 (of leather, mixed reactive azo
 dyes for)
 IT Dyes, reactive
 (azo, mixed, for dyeing and printing of cotton and
 leather)
 IT 80315-16-8 85946-16-3 85946-20-9
 104256-91-9 105936-66-1 105956-68-1
 107143-06-6 109295-78-5 109295-80-9
 115662-23-2 131733-83-0 139261-22-6
 149124-57-2 149124-58-3 149124-59-4
 149124-60-7 149124-61-8 149124-62-9
 149124-63-0 149124-64-1 149124-65-2
 149124-66-3 149124-67-4 149124-68-5
 149124-69-6 149124-70-9 149124-71-0
 149124-72-1
 RL: USES (Uses)
 (mixed reactive azo dyes containing, for
 cotton and leather)

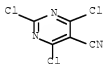
L31 ANSWER 21 OF 24 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1992:22868 HCAPLUS Full-text
 DOCUMENT NUMBER: 116:22868
 ORIGINAL REFERENCE NO.: 116:3999a,4002a
 TITLE: Reactive disazo dyes, their
 manufacture and use, and fabrics dyed with them
 INVENTOR(S): Gisler, Markus
 PATENT ASSIGNEE(S): Sandoz-Patent-G.m.b.H., Germany
 SOURCE: Ger. Offen., 15 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4039864	A1	19910620	DE 1990-4039864	19901213 <--
FR 2655995	A1	19910621	FR 1990-15548	19901210 <--
ES 2027868	A6	19920616	ES 1990-3192	19901213 <--
JP 04209659	A	19920731	JP 1990-419205	19901214 <--
CH 680796	A5	19921113	CH 1990-3967	19901214 <--
BR 9100449	A	19920922	BR 1991-449	19910205 <--
US 5597903	A	19970128	US 1995-470669	19950606 <--
PRIORITY APPLN. INFO.:			DE 1989-3941639	A1 19891216 <--
			US 1990-627292	B1 19901214 <--
			US 1992-909558	B1 19920706 <--
OTHER SOURCE(S):	MARPAT 116:22868			
GI				



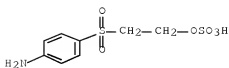
- AB Disazo dyes I (X, Y = substituted benzene or naphthalene diazo component residue, ≥ 1 of which contains a $\text{SO}_2\text{CH}_2\text{CH}_2$ group or precursor; Y contains a dichlorocyanopyrimidinylamino group) and their salts have good fastness properties on leather and natural and synthetic cellulosic and polyamide fibers. Thus, 4-aminophenyl 2-sulfatoethyl sulfone was diazotized and coupled with 1-amino-8-hydroxynaphthalene-3,6-disulfonic acid to give a monoazo intermediate (II). 2,4-Diaminobenzenesulfonic acid was condensed with 5-cyano-2,4,6-trichloropyrimidine and the condensate was diazotized and coupled with II to give I [sulfo group in position a; X = 4-(sulfatoethylsulfonyl)phenyl; Y = 5-(5-cyanodichloropyrimidinylamino)-2-sulfophenyl], which provided deep navy blue shades on cotton which were fast to light, moisture, and oxidation
- IT 3029-64-9
 RL: USES (Uses)
 (condensation of, with diaminobenzenesulfonic acid)
- RN 3029-64-9 HCAPLUS
- CN 5-Pyrimidinecarbonitrile, 2,4,6-trichloro- (CA INDEX NAME)



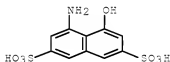
- IT 88-63-1, 2,4-Diaminobenzenesulfonic acid
 RL: USES (Uses)
 (condensation of, with trichlorocyanopyrimidine)
- RN 88-63-1 HCAPLUS
- CN Benzenesulfonic acid, 2,4-diamino- (CA INDEX NAME)



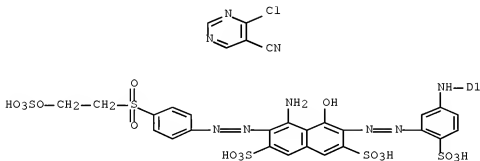
- IT 2494-89-5, 4-Aminophenyl 2-sulfatoethyl sulfone
 RL: USES (Uses)
 (coupling of diazotized, with aminohydroxynaphthalenedisulfonic acid)
- RN 2494-89-5 HCAPLUS
- CN Ethanol, 2-[(4-aminophenyl)sulfonyl]-, 1-(hydrogen sulfate) (CA INDEX NAME)



IT 90-20-0
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (coupling of, with diazotized aminophenyl sulfatoethyl sulfone)
 RN 90-20-0 HCAPLUS
 CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy- (CA INDEX NAME)



IT 138081-66-0P
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (preparation of, as navy blue dye for cotton)
 RN 138081-66-0 HCAPLUS
 CN 2,7-Naphthalenedisulfonic acid, 4-amino-6-[[5-[[2,6(or 4,6)-dichloro-5-cyano-4(or 2)-pyrimidinyl]amino]-2-sulphophenyl]azo]-5-hydroxy-3-[[4-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]azo]- (9CI) (CA INDEX NAME)



D1—C1

IC ICM C09B062-01
 ICS C09B062-25; C09B067-22; D06P001-38; D06P003-10; D06P003-66;
 D06P003-32
 ICA C09B062-513; C09B062-533; C09B033-10; C09D011-02
 CC 41-3 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic

Sensitizers)
 Section cross-reference(s): 40, 45
 ST disazo reactive dye cotton;
 IT dichlorocyanopyrimidinylamino group reactive dye
 Dyeing
 Textile printing
 (of cotton, with reactive disazo dyes)
 IT Leather
 (reactive disazo dyes for, with
 dichlorocyanopyrimidinylamino groups)
 IT Polyamide fibers, miscellaneous
 RL: MSC (Miscellaneous)
 (reactive disazo dyes for, with
 dichlorocyanopyrimidinylamino groups)
 IT Dyes, reactive
 (azo, disazo, with dichlorocyanopyrimidinylamino groups, for
 leather and cellulosic and polyamide fibers)
 IT 3029-64-9
 RL: USES (Uses)
 (condensation of, with diaminobenzenesulfonic acid)
 IT 88-63-1, 2,4-Diaminobenzenesulfonic acid
 RL: USES (Uses)
 (condensation of, with trichlorocyanopyrimidine)
 IT 2494-89-3, 4-Aminophenyl 2-sulfatoethyl sulfone
 RL: USES (Uses)
 (coupling of diazotized, with aminohydroxynaphthalenedisulfonic acid)
 IT 90-20-0
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (coupling of, with diazotized aminophenyl sulfatoethyl sulfone)
 IT 138081-66-0P
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (preparation of, as navy blue dye for cotton)

L31 ANSWER 22 OF 24 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1991:538207 HCAPLUS Full-text
 DOCUMENT NUMBER: 115:138207
 ORIGINAL REFERENCE NO.: 115:23695a, 23698a
 TITLE: Bifunctional reactive copper formazan
 dyes, their preparation and use
 INVENTOR(S): Lehmann, Urs; Koller, Josef
 PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.
 SOURCE: Eur. Pat. Appl., 31 pp.
 CODEN: EPXXDW

DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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EP 410930	A2	19910130	EP 1990-810546	19900717 <--
EP 410930	A3	19910206		
EP 410930	B1	19950419		
R: BE, CH, DE, ES, FR, GB, IT, LI				
ES 2071076	T3	19950616	ES 1990-810546	19900717 <--
US 5112958	A	19920512	US 1990-555335	19900719 <--
JP 03059079	A	19910314	JP 1990-194107	19900724 <--
PRIORITY APPLN. INFO.:			CH 1989-2761	A 19890724 <--
OTHER SOURCE(S):	MARPAT 115:138207			

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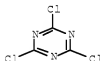
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Blue dyes I (R = Cl-4 alkyl, Cl-4 alkoxy, halogen, CN, NO₂; X = F, Cl; Y = CH₂CH₂Cl, CH:CH₂; n = 0-2), useful for dyeing or printing of paper, leather, or textiles containing N or OH groups, also useful in the trichromic dyeing of textiles, are prepared. Thus, the Cu formazan chromophore II was dissolved in water, condensed with cyanuric chloride, and the condensate condensed with 4-(2-chloroethylsulfonyl)aniline, forming the tri-Na salt of I (Y = CH₂CH₂Cl-4, X = Cl, n = 0, sulfo group in 4 position), which dyed wool in fast blue shades.

IT 108-77-0, Cyanuric chloride 675-14-9, Cyanuric fluoride
 RL: USES (Uses)
 (condensation of, with amines in reactive dye manufacture)

RN 108-77-0 HCAPLUS

CN 1,3,5-Triazine, 2,4,6-trichloro- (CA INDEX NAME)



RN 675-14-9 HCAPLUS

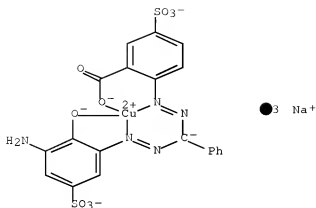
CN 1,3,5-Triazine, 2,4,6-trifluoro- (CA INDEX NAME)



IT 60265-89-6 77743-24-9
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (condensation of, with cyanuric chloride)

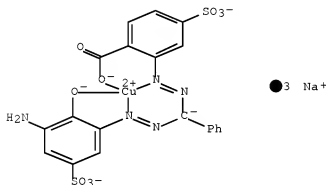
RN 60265-89-6 HCAPLUS

CN Cuprate(3-), [2-[[[(3-amino-2-(hydroxy-κO)-5-sulphophenyl)azo-κN2]phenylmethyl]azo-κN1]-5-sulfobenzoato(5-)-κO]-, trisodium (9CI) (CA INDEX NAME)



RN 77743-24-9 HCAPLUS

CN Cuprate (3-), [2-[[[[[3-amino-2-(hydroxy-KO)-5-sulfophenyl]azo-
κN2]phenylmethyl]azo-κN1]-4-sulfobenzoato(5-)-κO]-,
trisodium (9CI) (CA INDEX NAME)



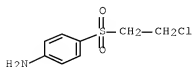
IT 20171-19-1 20171-20-4

RL: USES (Uses)

(condensation of, with halotriazines, in reactive formazan
dye manufacture)

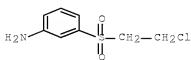
RN 20171-19-1 HCAPLUS

CN Benzenamine, 4-[(2-chloroethyl)sulfonyl]- (CA INDEX NAME)

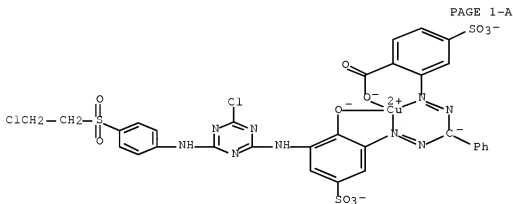


RN 20171-20-4 HCAPLUS

CN Benzenamine, 3-[(2-chloroethyl)sulfonyl]- (CA INDEX NAME)



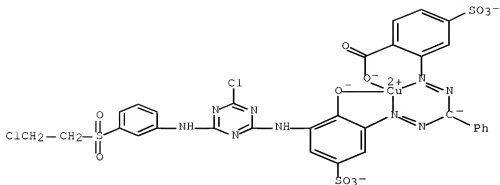
IT	135162-58-2P 135162-60-6P
	RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent) (manufacture and dehydrochlorination of, as blue dye for wool)
RN	135162-58-2 HCAPLUS
CN	Cuprate(3-), [2-[[[3-[[4-chloro-6-[[4-[(2-chloroethyl)sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-2-hydroxy-5-sulfophenyl]azo]phenylmethyl]azo]-4-sulfobenzoato(5-)]-, trisodium (9CI) (CA INDEX NAME)



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IT 135162-59-3P 135162-61-7P 135162-62-8P

135162-63-9P 135162-64-0P 135162-65-1P

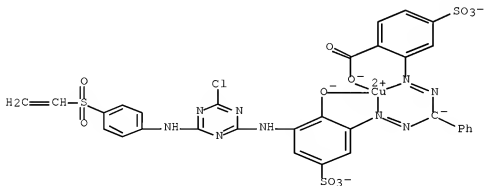
136074-14-1P

RL: PREP (Preparation)

(manufacture of, as blue dye for wool)

RN 135162-59-3 HCAPLUS

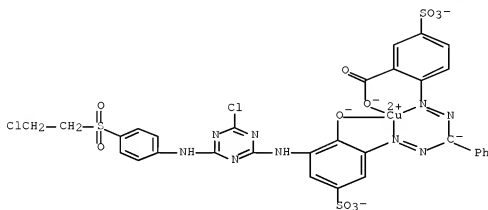
CN Cuprate(3-), [2-[[[3-[[4-chloro-6-[[4-(ethenylsulfonyl)phenyl]amino]-1,3,5-triazin-2-yl]amino]-2-hydroxy-5-sulfophenyl]azo]phenylmethyl]azo]-4-sulfobenzoato(5-)]-, trisodium (9CI) (CA INDEX NAME)



RN 135162-61-7 HCAPLUS

CN Cuprate(3-), [2-[[[3-[[4-chloro-5-[[4-[(2-chloroethyl)sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-2-hydroxy-5-sulphophenyl]azo]phenylmethyl]azo]-5-sulfobenzoato(5-)]-, trisodium (9CI)
(CA INDEX NAME)

PAGE 1-A



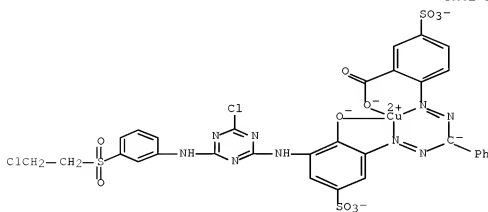
PAGE 2-A



RN 135162-62-8 HCAPLUS

CN Cuprate(3-), [2-[[[3-[[4-chloro-6-[3-[(2-chloroethyl)sulfonyl]phenyl]-1,3,5-triazin-2-yl]amino]-2-hydroxy-5-sulphophenyl]azo]phenylmethyl]azo]-5-sulfobenzoato(5-)]-, trisodium (9CI) (CA INDEX NAME)

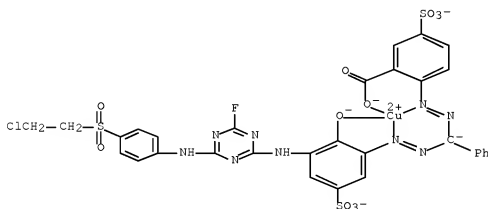
PAGE 1-A





RN 135162-63-9 HCAPLUS

CN Cuprate(3-), [2-[[[3-[[4-[(2-chloroethyl)sulfonyl]phenyl]amino]-6-fluoro-1,3,5-triazin-2-yl]amino]-2-hydroxy-5-sulfophenyl]azo]phenylmethyl]azo]-5-sulfobenzoato(5-)]-, trisodium (9CI)
(CA INDEX NAME)

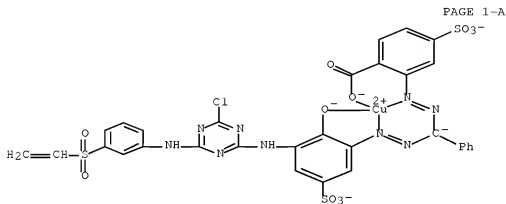


RN 135162-64-0 HCAPLUS

CN Cuprate(3-), [2-[[[3-[[4-fluoro-6-[[3-[(2-chloroethyl)sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-2-hydroxy-4-sulfophenyl]azo]phenylmethyl]azo]-5-sulfobenzoato(5-)]-, trisodium (9CI)
(CA INDEX NAME)

RN 136074-14-1 HCAPLUS

CN Cuprate(3-), [2-[[[3-[[4-chloro-6-[[3-(ethenylsulfonyl)phenyl]amino]-1,3,5-triazin-2-yl]amino]-2-hydroxy-5-sulfophenyl]azo]phenylmethyl]azo]-4-sulfobenzoato(5-)]-, trisodium (9CI) (CA INDEX NAME)



PAGE 2-A

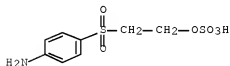
● 3 Na⁺

IT 2494-89-5

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with cyanuric fluoride, in reactive formazan
dye manufacture)

RN 2494-89-5 HCAPLUS

CN Ethanol, 2-[(4-aminophenyl)sulfonyl]-, 1-(hydrogen sulfate) (CA INDEX NAME)



IC ICM C09B062-503

ICS D06P003-10; D06P001-384

CC 41-3 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)

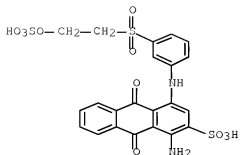
Section cross-reference(s): 40, 43, 45

ST bifunctional reactive copper formazan dye; wool
dyeing copper formazan dye; paper dyeing copper formazan
dye; leather dyeing copper formazan dye; textile
printing copper formazan dye

IT Leather

Paper

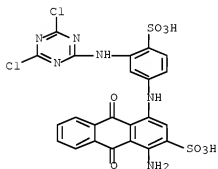
- (dyes for, bifunctional reactive blue copper formazan compds. as, manufacture of)
- IT Dyes, reactive
(bifunctional, copper formazans, manufacture of blue, for paper and leather and nitrogen- or hydroxyl group-containing fibers)
- IT 103-77-0, Cyanuric chloride 675-14-9, Cyanuric fluoride
RL: USES (Uses)
(condensation of, with amines in reactive dye manufacture)
- IT 60265-39-6 77743-24-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation of, with cyanuric chloride)
- IT 20171-19-1 20171-20-4
RL: USES (Uses)
(condensation of, with halotriazines, in reactive formazan dye manufacture)
- IT 135162-58-2P 135162-60-6P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(manufacture and dehydrochlorination of, as blue dye for wool)
- IT 135162-59-3P 135162-61-7P 135162-62-8P
135162-63-9P 135162-64-0P 135162-65-1P
136074-14-1P
RL: PREP (Preparation)
(manufacture of, as blue dye for wool)
- IT 2494-89-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with cyanuric fluoride, in reactive formazan dye manufacture)
- L31 ANSWER 23 OF 24 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1985:97269 HCAPLUS Full-text
DOCUMENT NUMBER: 102:97269
ORIGINAL REFERENCE NO.: 102:15295a,15298a
TITLE: Use of reactive dyes for dyeing of pigskin
AUTHOR(S): Shao, Yun; Zhao, Shimin
CORPORATE SOURCE: Teach. Res. Lab. Dyeing, East China Inst. Text. Eng., Shanghai, Peop. Rep. China
SOURCE: Pige Keji (1984), (7), 11-16
CODEN: PKKCDQ; ISSN: 0253-3642
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
- AB Reactive dyes imparted better fastness to wet rubbing in the dyeing of pigskins, compared with acid dyes. For chrome-tanned pigskins, dyeing temps. were controlled at 70-80°. For vinyl sulfone-type dyes, good results were obtained by dyeing 45 min at pH 4.5 and fixing 45 min at pH 6.5.
- IT 2580-78-1 13324-20-4 70209-99-3
70416-86-3
RL: USES (Uses)
(dyeing by, of chrome-tanned pigskin)
- RN 2580-78-1 HCAPLUS
CN 2-Anthracenesulfonic acid, 1-amino-9,10-dihydro-9,10-dioxo-4-[[3-[[2-(sulfoxy)ethyl]sulfonyl]phenyl]amino]-, sodium salt (1:2) (CA INDEX NAME)



●2 Na

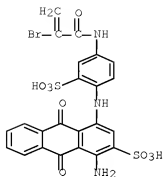
RN 13324-20-4 HCAPLUS

CN 2-Anthracesulfonic acid, 1-amino-4-[[3-[(4,6-dichloro-1,3,5-triazin-2-yl)amino]-4-sulfophenyl]amino]-9,10-dihydro-9,10-dioxo- (CA INDEX NAME)



RN 70209-99-3 HCAPLUS

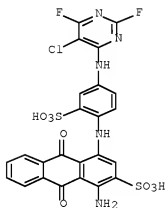
CN 2-Anthracesulfonic acid, 1-amino-4-[[4-[(2-bromo-1-oxo-2-propen-1-yl)amino]-2-sulfophenyl]amino]-9,10-dihydro-9,10-dioxo-, sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 70416-86-3 HCAPLUS

CN 2-Anthracenesulfonic acid, 1-amino-4-[[4-[(5-chloro-2,6-difluoro-4-pyrimidinyl)amino]-2-sulphophenyl]amino]-9,10-dihydro-9,10-dioxo-, sodium salt (1:2) (CA INDEX NAME)



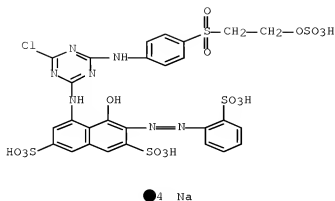
●2 Na

IT 23354-53-2

RL: USES (Uses)
(dyeing of pigskin by)

RN 23354-53-2 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 5-[[[4-chloro-6-[[[2-(sulfooxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]-4-hydroxy-3-[2-(2-sulphophenyl)diazenyl]-, sodium salt (1:4) (CA INDEX NAME)



CC 45-2 (Industrial Organic Chemicals, Leather, Fats, and Waxes)
 ST dyeing pigskin reactive dye
 IT Process optimization
 (of dyeing of pigskins, with reactive dyes
)
 IT leather
 (pigskin, dyeing of, with reactive dyes)
 IT Dyeing
 (reactive, of pigskins)
 IT 2580-78-1 12226-38-9 13324-20-4 70209-99-3
 70416-86-3 91254-15-8 95145-55-4 95145-60-1
 RL: USES (Uses)
 (dyeing by, of chrome-tanned pigskin)
 IT 23354-53-2 95145-51-0 95145-53-2 95145-56-5 95145-58-7
 95145-59-8
 RL: USES (Uses)
 (dyeing of pigskin by)

L31 ANSWER 24 OF 24 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1982:425511 HCAPLUS [Full-text](#)
 DOCUMENT NUMBER: 97:25511
 ORIGINAL REFERENCE NO.: 97:4459a,4462a
 TITLE: Dyeing of leather powder, fibers, and
 articles flocked with them
 PATENT ASSIGNEE(S): Iizuka, Katsuo, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 57047982	A	19820319	JP 1980-121342	19800901 <--
			JP 1980-121342	19800901 <--

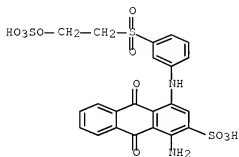
PRIORITY APPLN. INFO.:
 AB Dyeing with reactive dyes at pH 9.0-13.5 gives good fastness of color. Thus, a flocked article was treated with 1% aqueous glutaraldehyde and dyed with C.I. Reactive Blue 19 [2580-78-1] at dye concentration 2%, 40%, and pH 10.5 for 60 min to give dye fastness ranking 5, compared with 2 for dyeing powdered leather with an acidic dye at dye concentration 2%, 60%, and pH 40 for 50 min.
 IT 2580-78-1 17095-24-8

RL: USES (Uses)

(dyeing by, of powdered leather)

RN 2580-78-1 HCAPLUS

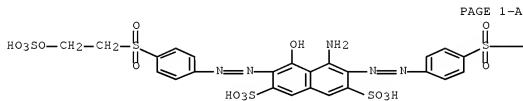
CN 2-Anthracenesulfonic acid, 1-amino-9,10-dihydro-9,10-dioxo-4-[[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]amino]-, sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 17095-24-8 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3,6-bis[2-[4-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]diazonyl]-, sodium salt (1:4) (CA INDEX NAME)



●4 Na

PAGE 1-A

PAGE 1-B

—CH₂—CH₂—OSO₃H

IC D06P003-32

CC 45-2 (Industrial Organic Chemicals, Leather, Fats, and Waxes)

ST dye reactive powd leather; fiber
leather reactive dye; flocked article
reactive dye

IT leather

11/628659

(dyeing of powdered, with reactive dyes)
IT Flocks
(powdered leather, dyeing of, with reactive
dyes)
IT Dyeing
(reactive, of powdered leather)
IT 2580-78-1 12225-34-2 17095-24-8 51811-46-2
RL: USES (Uses)
(dyeing by, of powdered leather)

=> d his nofi

(FILE 'HOME' ENTERED AT 07:46:36 ON 17 APR 2009)

FILE 'HCAPLUS' ENTERED AT 07:46:52 ON 17 APR 2009

E US20070234488/PN

L1 1 SEA ABB=ON PLU=ON US20070234488/PN

FILE 'REGISTRY' ENTERED AT 07:47:21 ON 17 APR 2009

L2 STRUCTURE UPLOADED

D

Uploading L2.str



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1  2  3  4  5  6  7  8
ring nodes :
12 13 14 15 16 17
chain bonds :
1-2 1-3 1-4 5-6 7-8
ring bonds :
12-13 12-17 13-14 14-15 15-16 16-17
exact/norm bonds :
1-2 1-3 1-4
exact bonds :
5-6 7-8
normalized bonds :
12-13 12-17 13-14 14-15 15-16 16-17

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G1:[*1],[*2]

Match level :

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1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 12:CLASS
13:Atom 14:Atom 15:Atom 16:Atom 17:Atom

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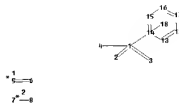
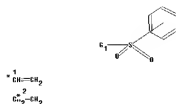
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L3          50 SEA SSS SAM L2
L4          320388 SEA SSS FUL L2
           SAVE TEMP L4 HAM659REGL2/A

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L5 STRUCTURE UPLOADED
D

Uploading L3.str



chain nodes :
1 2 3 4 5 6 7 8
ring nodes :
12 13 14 15 16 17
chain bonds :
1-2 1-3 1-4 5-6 7-8
ring bonds :
12-13 12-17 13-14 14-15 15-16 16-17
exact/norm bonds :
1-2 1-3 1-4
exact bonds :
5-6 7-8
normalized bonds :
12-13 12-17 13-14 14-15 15-16 16-17

G1:[*1],[*2]

Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 12:CLASS
13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom

L6 50 SEA SUB=L4 SSS SAM L5
L7 81379 SEA SUB=L4 SSS FUL L5
SAVE TEMP L7 HAM659REGL3/A

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L8 15842 SEA ABB=ON PLU=ON L7
L9 106 SEA ABB=ON PLU=ON L8 AND 45/SC,SX
E LEATHER/CT
E E3+ALL
L10 25967 SEA ABB=ON PLU=ON LEATHER+OLD,UF/CT
L11 52 SEA ABB=ON PLU=ON L9 AND L10
E DYES/CT
E E3+ALL
E E54+ALL
L12 6352 SEA ABB=ON PLU=ON "REACTIVE DYES"+OLD/CT

11/628659

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L13      67221 SEA ABB=ON PLU=ON (DYE# OR DYEING#) (2A) (REACT? OR AZO? OR
POLYAZO?)
L14      20 SEA ABB=ON PLU=ON L11 AND L12
L15      50 SEA ABB=ON PLU=ON L11 AND L13
L16      50 SEA ABB=ON PLU=ON L15 AND L10
L17      50 SEA ABB=ON PLU=ON L15 AND (LEATHER?)
L18      50 SEA ABB=ON PLU=ON L16 OR L17
L19      47 SEA ABB=ON PLU=ON L18 AND (AY<2005 OR PY<2005 OR PRY<2005)
SEL RN L19

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FILE 'STNGUIDE' ENTERED AT 08:05:06 ON 17 APR 2009

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FILE 'HCAPLUS' ENTERED AT 08:07:04 ON 17 APR 2009
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E REACTIVE DYEING/CT
E E3+ALL
L21      4291 SEA ABB=ON PLU=ON "REACTIVE DYEING"+OLD/CT
L22      7828 SEA ABB=ON PLU=ON REACTIVE (L) DYEING
E TANNING/CT
E E4+ALL
L23      11591 SEA ABB=ON PLU=ON "TANNING (CURING)" +OLD/CT
L24      15 SEA ABB=ON PLU=ON L19 AND L21
L25      24 SEA ABB=ON PLU=ON L19 AND L22
L26      24 SEA ABB=ON PLU=ON L24 OR L25
SAVE TEMP L26 HAM659HCAP/A
SEL RN L26

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FILE 'STNGUIDE' ENTERED AT 08:11:34 ON 17 APR 2009

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FILE 'REGISTRY' ENTERED AT 08:13:20 ON 17 APR 2009
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88-63-1/BI OR 90-20-0/BI OR 108-45-2/BI OR 110-16-7/BI OR
110-17-8/BI OR 145017-98-7/BI OR 174491-68-0/BI OR 3029-64-9/BI
OR 41261-80-7/BI OR 59-67-6/BI OR 675-14-9/BI OR 68-11-1/BI
OR 6915-15-7/BI OR 697-83-6/BI OR 71902-16-4/BI OR 77-92-9/BI
OR 10139-51-2/BI OR 102-01-2/BI OR 103-69-5/BI OR 104256-91-9/B
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11/628659

L28 267 SEA ABB=ON PLU=ON L27 AND N/ELS

FILE 'HCAPLUS' ENTERED AT 08:14:20 ON 17 APR 2009

L29 209186 SEA ABB=ON PLU=ON L28

L30 24 SEA ABB=ON PLU=ON L26 AND L29

L31 24 SEA ABB=ON PLU=ON L26 OR L30

 SAVE TEMP L31 HAM659HCAP/A

FILE 'STINGUIDE' ENTERED AT 08:17:26 ON 17 APR 2009

 D QUE L31

FILE 'HCAPLUS' ENTERED AT 08:18:47 ON 17 APR 2009

 D L31 1-24 IBIB ABS HITSTR HITIND

FILE 'STINGUIDE' ENTERED AT 08:19:21 ON 17 APR 2009